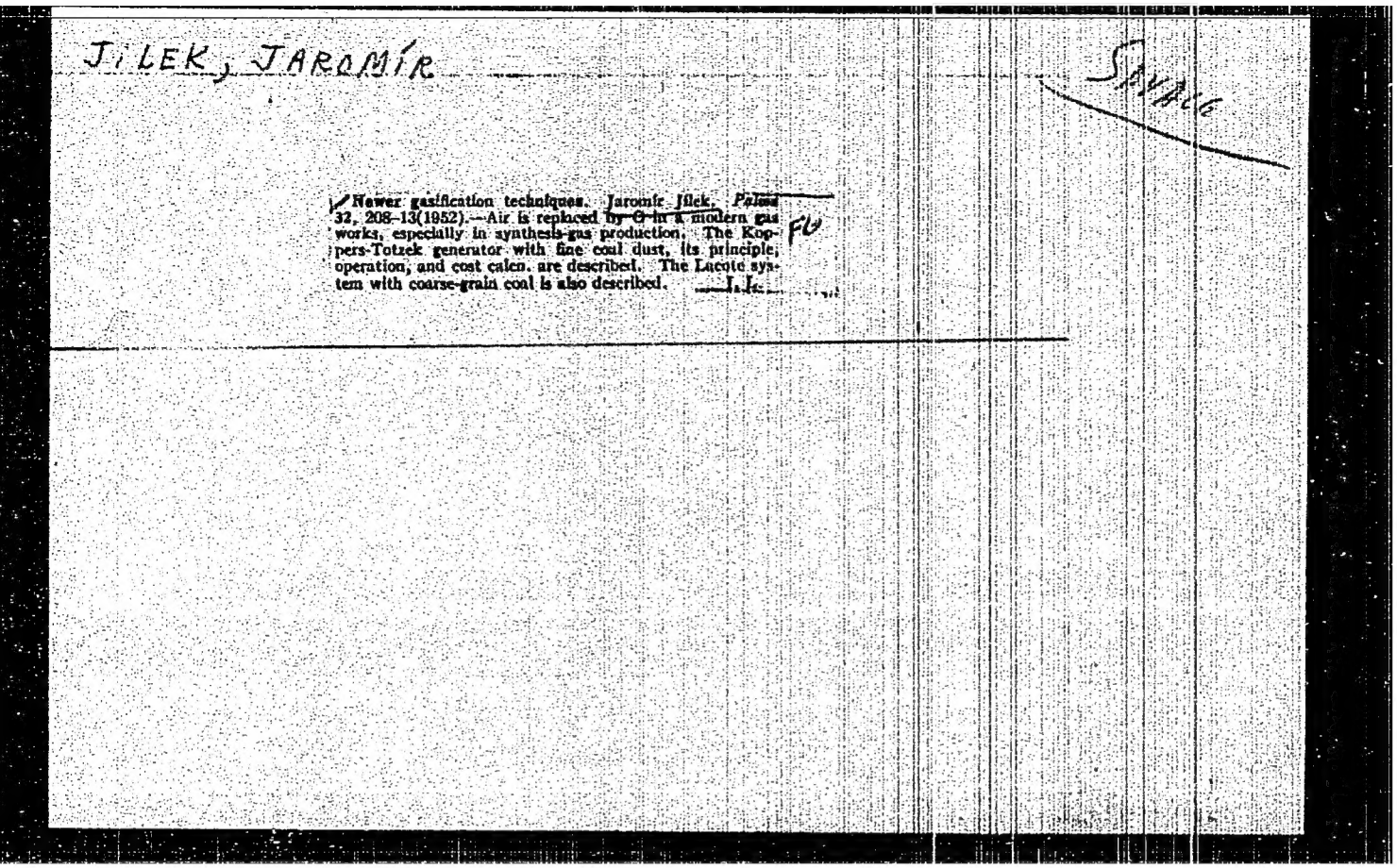
CA

21

Self-ignition and storage of brown-coal semi-coke. Jaromír Hlek. *Palivo* 31, 225-30(1951).—The semi-coke of brown coal in bulk storage tends to ignite spontaneously, particularly in summer. Heat is generated by processes such as adsorption of gases, oxidation, and absorption of H_2O. Granular semi-coke of grain sizes larger than 10 mm. is safe. Finer particles tend to self-ignite at the base of the pile, with the ashes formed preventing further burning. Large piles can be stored safely when sprayed with a H_2O suspension of lime. James L. Jezl



JILEK, JAROMÍR

Slavic

Newer gasification techniques. Jaromír Jílek. *Paliva* 32, 208–13(1952).—Air is replaced by O in a modern gas works, especially in synthesis-gas production. The Koppers-Totzek generator with fine coal dust, its principle, operation, and cost calcn. are described. The Lacote system with coarse-grain coal is also described. —J. Ja.

FW

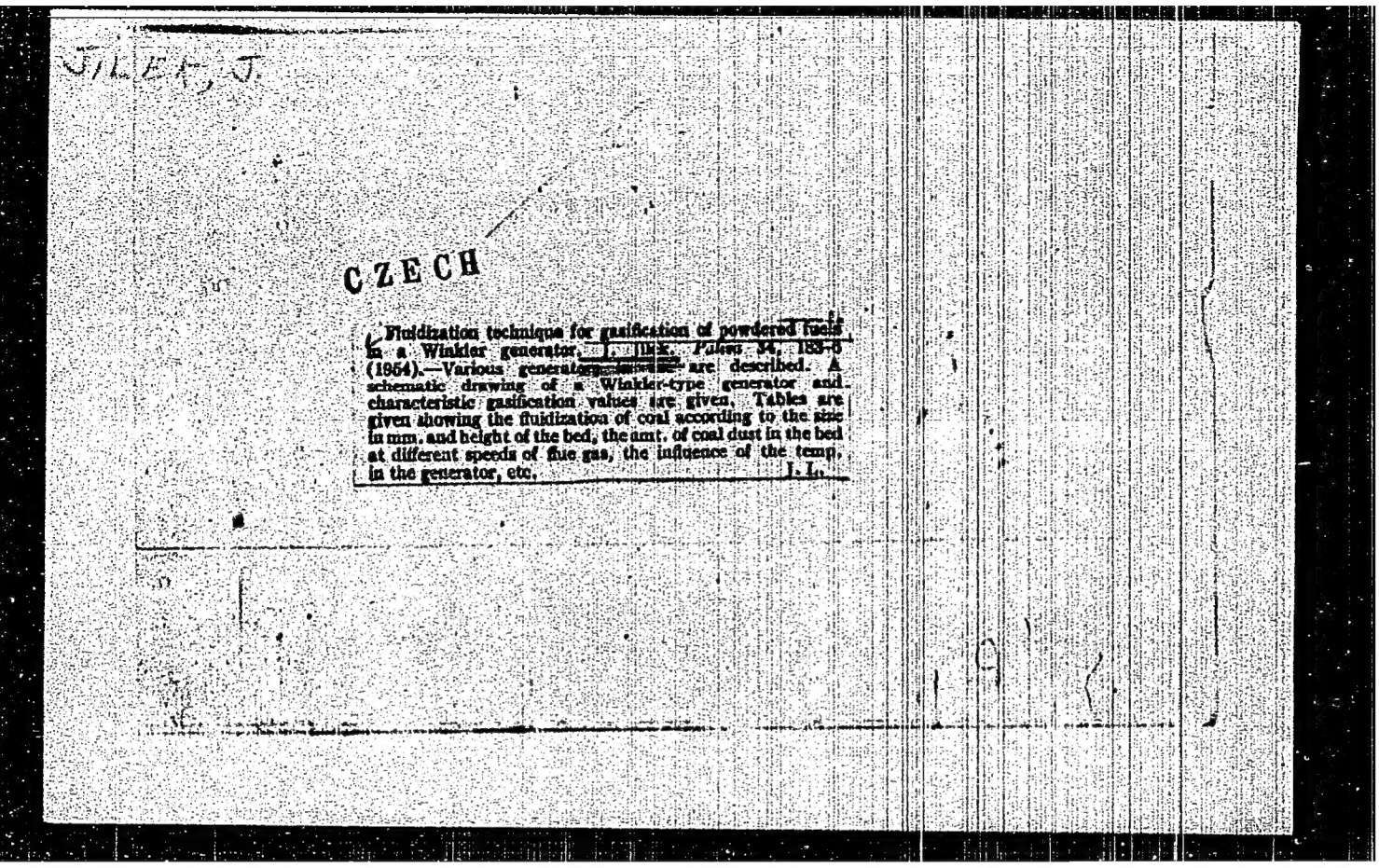
CZECH

2251. NEW METHODS OF GASIFYING PULVERIZED FUEL. Jilek, J. (Palivo (Fuel, Prague), May 1953, Vol. 33, 97-104; abstr. in Ref. Zhur. Khim. (Ref. J. Chem., Moscow), 15 Apr. 1954, (8), 247). The following plants are described. The Fier-Winkler, in which the steam-oxygen blast is passed alternately from top to bottom to top, with an output of 1000-1700 cu.m/sq.m of sectional area; the I.G.I. three-chamber generator of water gas, producer gas and carbonisation gas; the vibration generator, in which explosions of a mixture of pulverised fuel and air create rapid vibrations (80-100/min) of high amplitude and ensure good mixing of fuel and hot air; the Vortex cyclone generator, whose feeder runs at 1750 rev/min and passes 45.4 tons/h of coal; the Lurgi-Ruhrgas generator for very fine dust, which uses corundum balls as a solid heat carrier; and the two chamber generator with direct gas heating, producing water gas and lean gas. High output per unit of working space is a common feature of all these.

JILEK, J.

"Increasing The Heat Of Combustion Of Fuel Gas From Brown Coal. (To Be Contd.)." p. 117. (Paliva. Vol. 33, No. 4, Oct. 1953, Prague.)

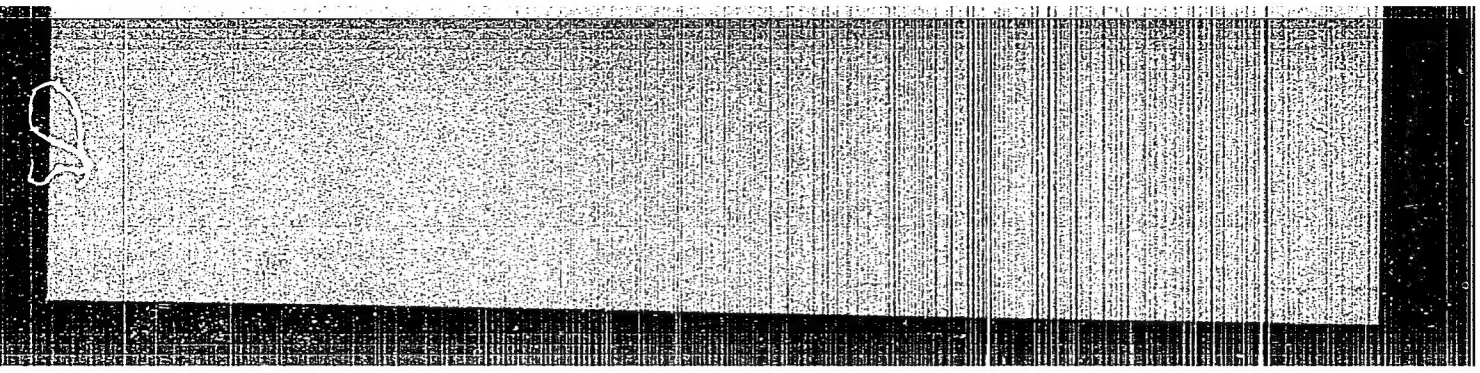
SO: Monthly List of East European Accessions, Library of Congress, Vol. 3, No. 3, March 1954, Uncl.



FILE #3

CZECH

Fluidization technique for gasification of powdered fuels in a Winkler generator. J. Hlavsa. *Palivo* 34, 153-6 (1954).—Various generators are described. A schematic drawing of a Winkler-type generator and characteristic gasification values are given. Tables are given showing the fluidization of coal according to the size in mm. and height of the bed, the amt. of coal dust in the bed at different speeds of flue gas, the influence of the temp. in the generator, etc. J. L.



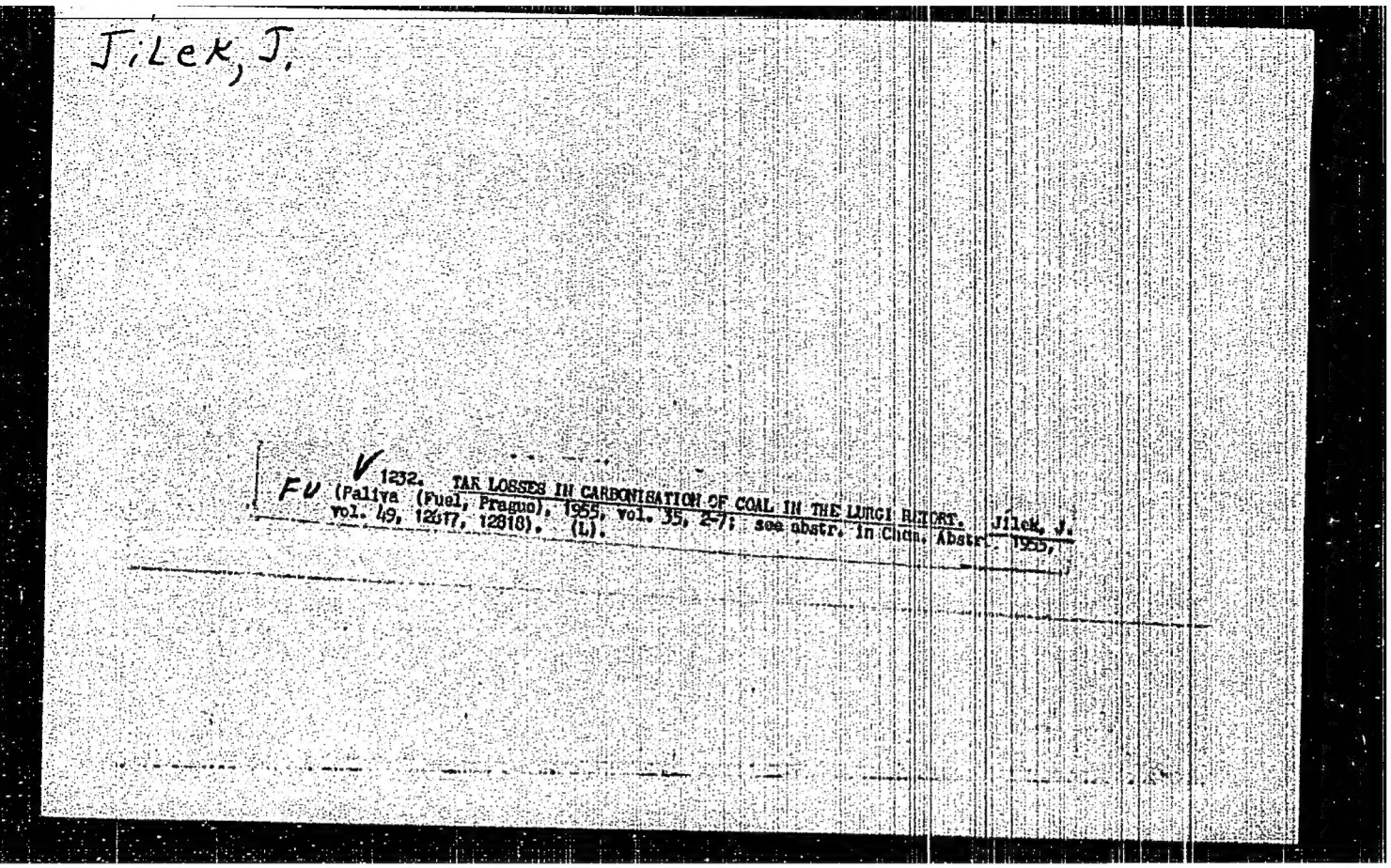
APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000619620013-3"

JILEK, J.

Economical method for drying crude coal.

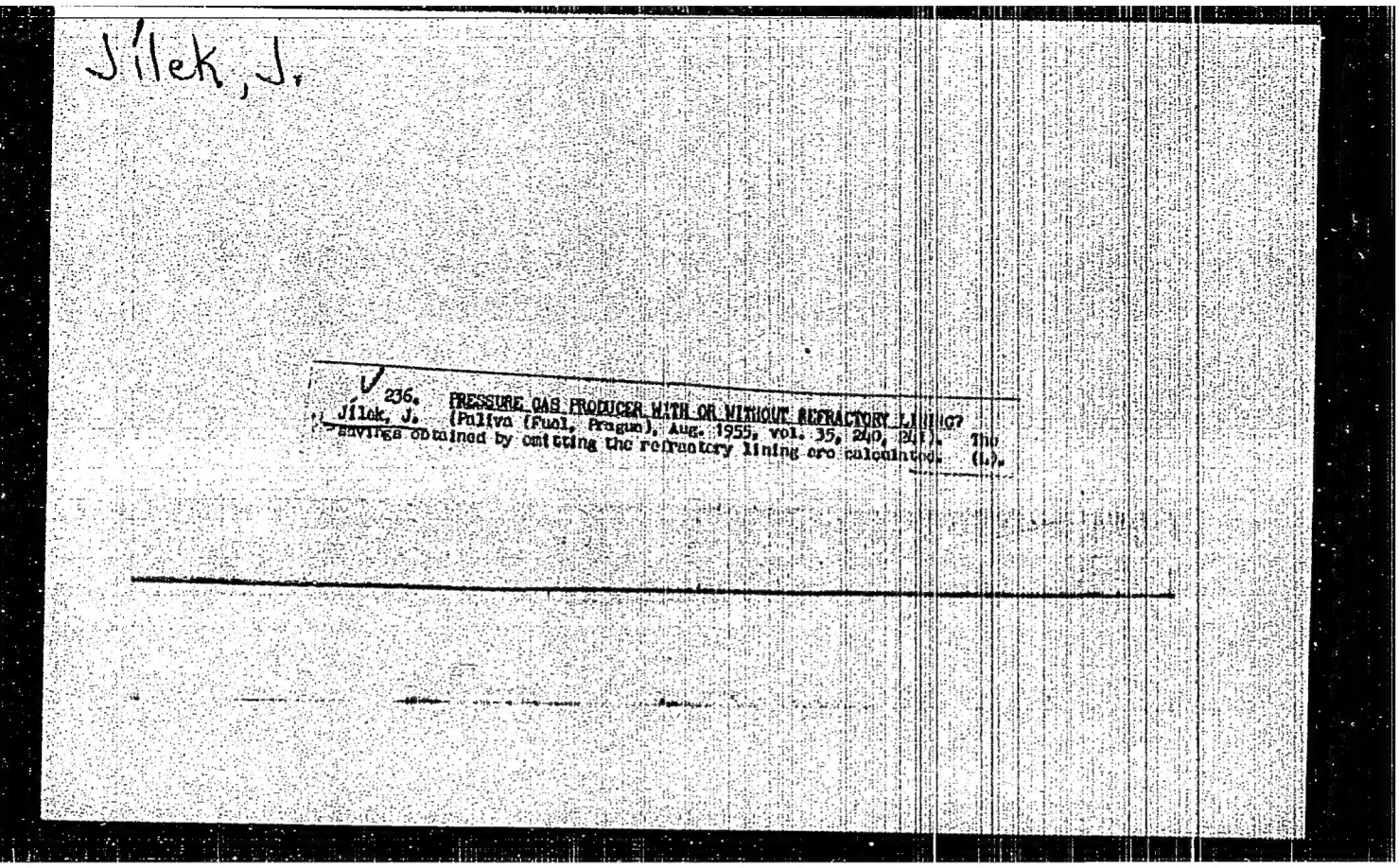
p. 323
Vol. 34, no. 12, Dec. 1954
PALIA
Praha

SOURCE: East European Accessions List (EEAL), LC, VOL. 5, no. 3, March 1956



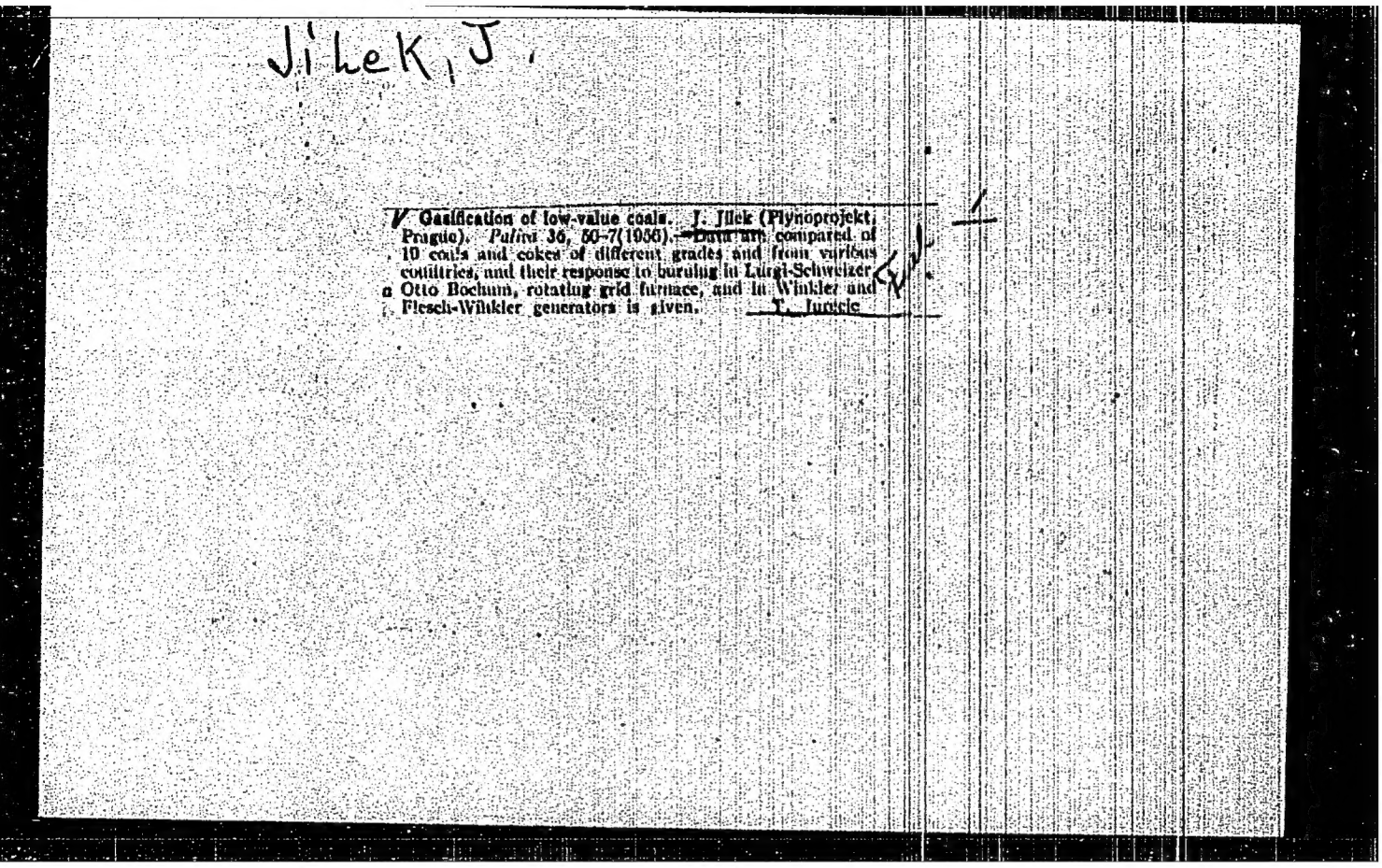
Jilek, J.

Fu V 1232. TAR LOSSES IN CARBONISATION OF COAL IN THE LURGI RETORT. Jilek, J. (Paliva (Fuel, Prague), 1955, vol. 35, 2-7; see abstr. in Chim. Abstr., 1955, vol. 49, 12617, 12818). (L).



Jílek, J.

236. PRESSURE GAS PRODUCER WITH OR WITHOUT REFRACTORY LINING?
Jílek, J. (Paliva (Fuel, Prague), Aug. 1955, vol. 35, 240, [illegible]). The
savings obtained by omitting the refractory lining are calculated. (L).



Jilek, J.

V Gasification of low-value coals. J. Jílek (Plynoprojekt, Prague). *Paliva* 36, 50-7(1956).—Data are compared of 10 coals and cokes of different grades and from various countries, and their response to burning in Lurgi-Schweizer a Otto Bochum, rotating grid furnace, and in Winkler and Flesch-Winkler generators is given. —T. Jurecic

CZECHOSLOVAKIA / Chemical Technology. Chemical Products H-22
and Their Application. Chemical Processing of Solid Fossil Fuels.

Abs Jour: Ref Zhur-Khimiya, No 1, 1959, 2438.

Author : Jilek, J.
Inst : Not given.
Title : The Study on a Problem of Complex Chemical-Energetic Utilization of Brown Coal.

Orig Pub: Paliva, 1956, 36, No 7, 216-225.

Abstract: The fundamental technological scheme was examined for the complex chemical — energetic processing of brown coal under Czechoslovakian conditions. A mixture of young brown coals is being sorted, which is composed of two types having the following composition (in %) : moisture 42, ash 12, tar yield 8.7 and caloric value 3300 kilocalories/kilogram. Coal of the 0-12

Card 1/2

JILEK, Yaromir [Jilek, Jaromir]; ZHUKOV, A.A., inzhener [translator]; SHISHAKOV, N.V., doktor tekhnicheskikh nauk, redaktor; KLEYMENOVA, K.F., vedushchiy redaktor; MARTYNOVA, M.P., vedushchiy redaktor; POLOSINA, A.S., tekhnicheskiy redaktor

[New methods of gasification of fuel by oxygen. Translated from the Czech] Novye sposoby gasifikatsii topliva kislorodom. Perevod s cheshskogo A.A.Zhukova, pod red. N.V.Shishakova. Moskva, Gos.nauchno-tekhn. izd-vo neft. i gorno-toplivnoi lit-ry, 1957. 362 p. (MLRA 10:9)
(Gas producers) (Coal gasification)

CZECHOSLOVAKIA/Chemical Technology - Processing of Solid Fossil Fuels. H-22

Abs Jour : Ref Zhur - Khimiya, No 24, 1958, 82970

Author : Jilek, J.
Inst : -
Title : The Purification of Ascending Gas by a Rectisol Method.

Orig Pub : Paliva, 1957, 37, No 0, 261-263.

Abstract : The method is based on the application of methanol as the solvent; one cubic meter of the latter at -60°C. adsorbs CO_2 72 times more than one cubic meter of water at 20°C. The dimensions of equipment are considerably smaller, whereas the process is simplified because in addition to CO_2 adsorption the methanol purifies the gas from the benzene impurity, S-compounds, tar-forming substances and dries the gas. A description of the technological scheme for the purification is given and the savings, resulting from the introduction of the method, are evaluated.

Card 1/1

CZECHOSLOVAKIA/Chemical Technology. Chemical Products and Their Application. Treatment of Solid Mineral Fuels. H

Abs Jour: Ref Zhur-Khim., No 13, 1958, 44531.

Author : Jilek J.
Inst :
Title : Low Temperature Carbonization of Bituminous Shale in China.

Orig Pub: Paliva, 1957, 37, No 12, 419-421.

Abstract: Presentation of particularized data (with appended diagrams) relating to vertical gas generators with distillation shafts for low temperature carbonization and gasification of Fushun shale, having a shaft diameter of 2.6, 3.0 and 3.35 m. These gas

Card : 1/2

JILEK, J.

COUNTRY : Czechoslovakia F
CATEGORY :

ABS. JOUR. : RZKhim., No. 20 1959, No. 71331

AUTHOR : Jilek, J.
INST. :
TITLE : A Source of High Voltage for Electromigration Processes

ORIG. PUB. : Chem. listy, 1958, 52, No 9, 1833-1834

ABSTRACT : Description of a source of high voltage for electrophoresis in paper, with an output of 3000 v and 1 a, or 5000 v and 0.75 a. The stepless control rectifier is a full-wave rectification circuit using UA 1 a gas-filled, gridless rectifier tubes. -- O. Knessel.

CARD:

3

JILEK, J.

On the all-round effectiveness of utilizing lignite and its products through combustion. (Conclusion) p. 95

PALIVA. (Ministerstvo paliv a Ceskoslovenska vedecka technicka spolecnost pro vyuziti pri Ceskoslovenske akademii ved) Praha, Czechoslovakia, Vol.39, No. 3, Mar. 1959

Monthly List of East European Accessions (EEAI), LV, Vol. 8, No. 7, July 1959
Uncl.

JILEK, J.; SLIVA, V.; DAHNELKA, J.

Use of lignite in the gas industry. p. 223.

PALIVA. (Ministerstvo paliv a Ceskoslovenska vedecka technicka spolecnost pro vyuziti paliv pri Ceskoslovenske akademii ved) Praha, Czechoslovakia, Vol. 39, no. 7, July 1959.

Monthly list of East European Accessions (EEAI) LC, Vol. 8, No. 11, November 1959.

uncl.

JIIEK, J., dr.

Economy of various methods of pressure gas cleaning.
Paliva 41 no.1:30-40 Ja '61.

JILEK, J., dr.

Examination of the economy of pressure gasification of ash and sulfur coal. Paliva 41 no.10:299-308 O '61.

1. Plynoprojekt, Praha.

JILEK, Jaromir, dr.

Control of the dispersion of fumes by changing their temperature. Energetika Cz 12 no.10:521-525 O '62.

1. Plynoprojekt, Praha.

JILEK, J., dr., inz.

Inertization of an explosive gas mixture by impure nitrogen.
Paliva 42 no.10:299-301 O '62.

1. Plynoprojekt, Praha.

RIEDL, R.; BENES, M.; JILEK, J., dr., inz.

Separation of condensates in lignite gasification under pressure.
Pavliva 43 no.2:42-44 F '63.

JILEK, J., dr. inz.

Development of lignite pressure gasification in Yugoslavia.
Paliva 44 no.9:274-277 S '64.

1. Plynoprojekt, Prague.

JILEK, J., dr. inz.

Gasification of solid and liquid fuels in the Koppers-Totzek generator. Paliva 45 no.2:49-53 F '65.

1. Plynoprojekt, Prague.

CZECHOSLOVAKIA

JILEK, J.O; PELZ, K; VEJDELEK, Z.J; PROTIVA, M

Research Institute for Pharmacy and Biochemistry (Forschungsinstitut fur Pharmazie and Biochemie), Prague

Prague, Collection of Czechoslovak Chemical Communications, No 1, January 1966, pp 269-278

"Neurotropic and psychotropic substances. Part 7: 2-alkoxy-9-(3-dimethylaminopropyliden) thioxanthene and an additional derivative of prothixene."

. CZECHOSLOVAKIA

JILEK, J., TRAVNICKOVA, E., TROJAN, S; Physiological Institute, Faculty of General Medicine, Charles University (Fysiologicky Ustav Fak. Vseob. Lek KU), Prague.

"Influence of Hypoxia on Glycogen Metabolism in the CNS in Ontogenesis."

Prague, Ceskoslovenska Fysiologie, Vol 15, No 2, Feb 66, pp 112-113

Abstract: Changes in the amount of glycogen and lactic acid in rat prosencephalon (P) and rhombencephalon (R) caused by 6 minutes of hypoxia at a simulated elevation of 12,000 meters was investigated. Rats were either adult or 5, 12 or 25 days old. Between the ages of 12 and 25 days hypoxia causes a decrease of glycogen in the brain and an increase in P and R. At other ages no changes were observed. In 12 day old rats lactic acid content increased by 300%. 1 Czech reference. Submitted at "16 Days of Physiology" at Kosice, 28 Sep 65.

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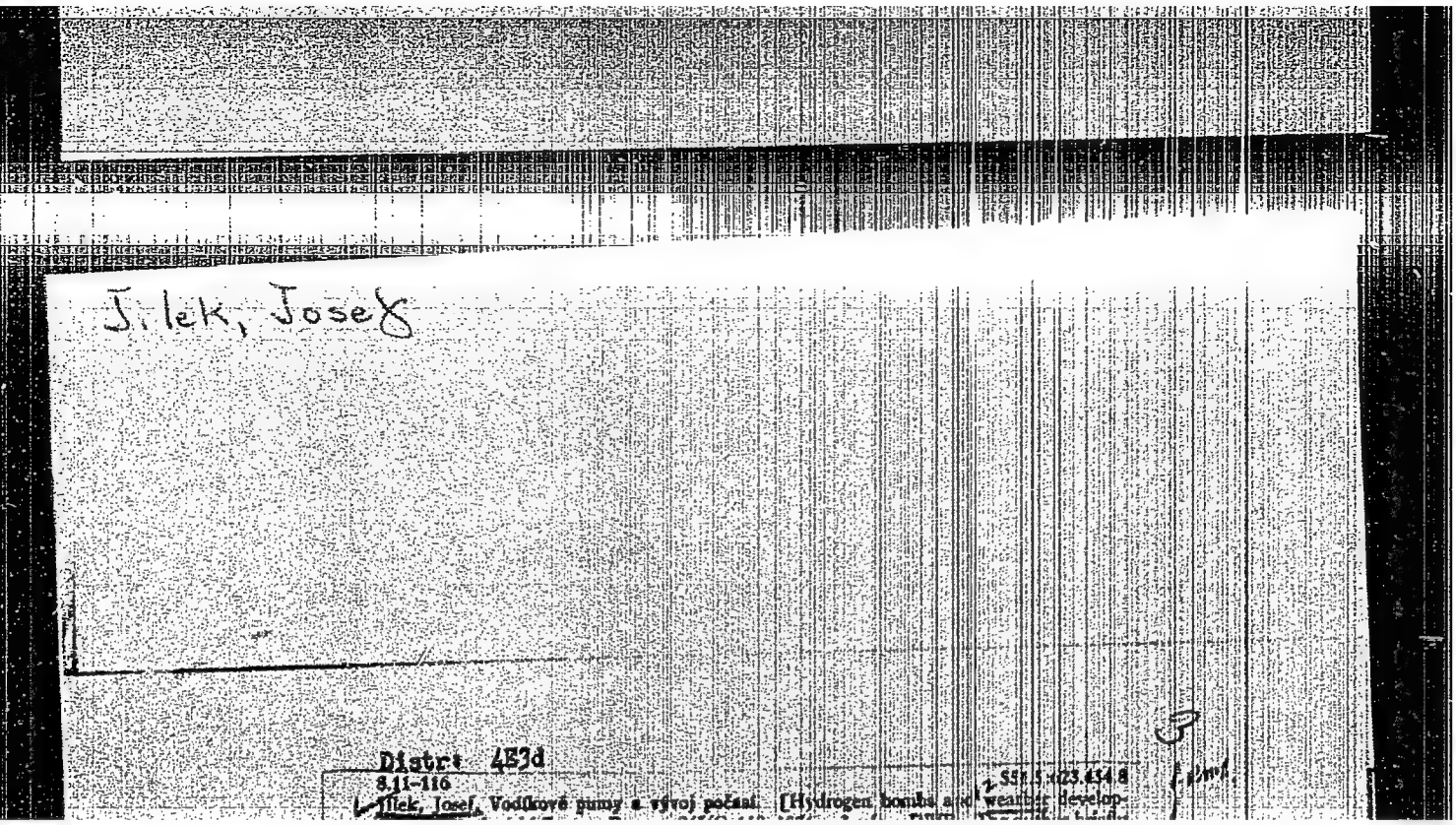


JILEK, J.

Seasons of the year.

p. 65 (Meteorologicke Zpravy) Vol. 10, no 3 June 1957. Praha, Czechoslovakia.

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7? no. 1, Jan 1958

JILEK, JOSEF

2

551.577(437.1)

J 10.4-265

Jílek, Josef, Atmosférické srážky v Čechách (1876–1956). [Precipitation in Bohemia, 1876–1956.] *Meteorologické Zprávy*, Prague, 10(5):133–134, 1957. 2 tables. DWB—Average precipitation values for Bohemia (average of all stations) are tabulated for every month from Jan. 1876 to Sept. 1957. Monthly and annual normals are also given in terms of intervals containing precipitation amounts which occurred in 50% of all cases. *Subject Headings:* 1. Precipitation normals 2. Precipitation data 3. Czechoslovakia.—G.T.

JW
1/1

12

JILEK, J.

SCIENCE

Periodicals: METEOROLOGICKE ZPRAVY. Vol. 11, no. 6, Dec. 1958

JILEK, J. Balance sheet of solar radiation in Prague. p. 165.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 5, May 1959, Unclass.

L 31482-66 FCC GW
ACC NR: AP6023106 SOURCE CODE: CZ/0085/65/000/006/0169/0170

AUTHOR: Jilek, Josef

ORG: HMU, Prague

TITLE: Problems of long term weather forecasting

SOURCE: Meteorologicke zpravy, no. 6, 1965, 169-170

TOPIC TAGS: long range weather forecasting, atmospheric pressure, atmospheric temperature, synoptic meteorology, atmospheric circulation

ABSTRACT: Long term forecasting of weather is extremely difficult. The author believes that the only reliable approach to the problem is the study of the general atmospheric circulation. The forecast should be based on the expected average barometric pressure and temperature, the sequence and type of the individual processes of circulation, and on the synoptic chart. A comparison of Russian, German, British, and the USA long term weather forecasting is made. Particular attention is given to the British method of weather forecasting. [JPRS]

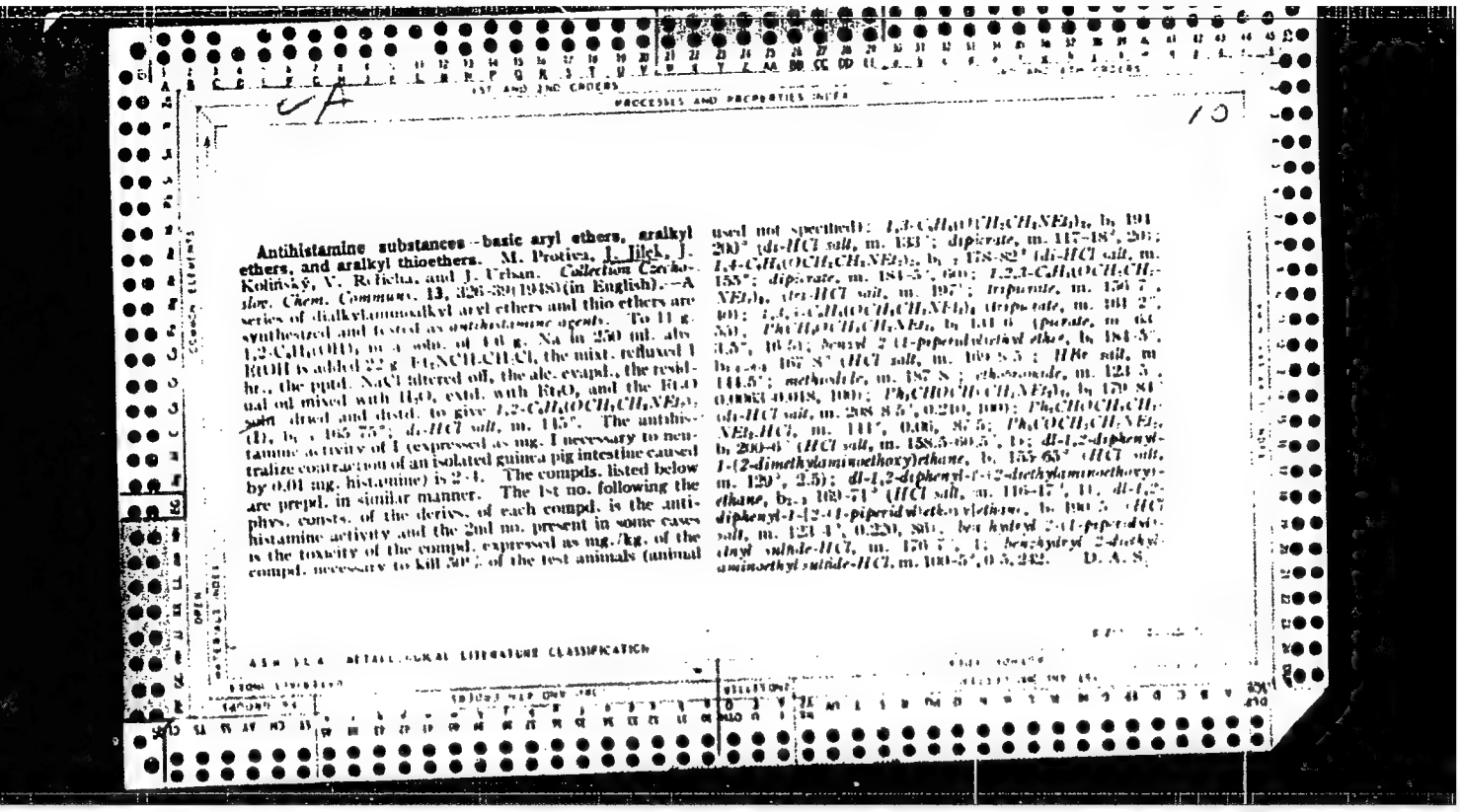
SUB CODE: 04 / SUBM DATE: none

Card 1/1mc UDC: 551.509.22

JILEK, J.O.; POMYKACEK, J.; JIRKOVSKY,I.; PROTIVA, M.

Synthetic ataractics. X. Improved methods of preparation of phenoharman. Cesk. farm. 13 no.5:229-233 Je'64

1. Vyzkumny ustav pro farmacii a biochemii, Praha.



Antihistamine substances.—basic aryl ethers, aralkyl ethers, and aralkyl thioethers. M. Protiva, J. Jilek, J. Kolinský, V. Ročiška, and J. Urban. *Collection Czech. Chem. Communs.* **13**, 326-39 (1948) (in English).—A series of dialkylaminoalkyl aryl ethers and thio ethers are synthesized and tested as *antihistamine agents*. To 11 g. 1,2-$C_6H_4(OH)_2$ in a soln. of 4.6 g. Na in 250 ml. abs. EtOH is added 22 g. $Et_2NCH_2CH_2Cl$, the mixt. refluxed 1 hr., the ppt. NaCl filtered off, the alc. evapd., the residual oil mixed with H_2O, extd. with Et_2O, and the Et_2O soln. dried and distd. to give 1,2-$C_6H_4(OCH_2CH_2NEt_2)_2$ (I), $b_{0.1}$ 165-75°; *di-HCl salt*, m. 145°. The antihistamine activity of I (expressed as mg. necessary to neutralize contraction of an isolated guinea pig intestine caused by 0.01 mg. histamine) is 2-4. The compds. listed below are prepd. in similar manner. The 1st no. following the phys. consts. of the derivs. of each compd. is the antihistamine activity and the 2nd no. present in some cases is the toxicity of the compd. expressed as mg./kg. of the compd. necessary to kill 50% of the test animals (animal used not specified): 1,3-$C_6H_4(OCH_2CH_2NEt_2)_2$, $b_{0.1}$ 191-200° (*di-HCl salt*, m. 133°; *dipicrate*, m. 117-18°, 25); 1,4-$C_6H_4(OCH_2CH_2NEt_2)_2$, $b_{0.1}$ 178-82° (*di-HCl salt*, m. 155°; *dipicrate*, m. 184-5°, 100; 1,2,3-$C_6H_3(OCH_2CH_2NEt_2)_3$, *tri-HCl salt*, m. 197°; *tripicrate*, m. 156-7°, 40); 1,4,5-$C_6H_3(OCH_2CH_2NEt_2)_3$ (*tripicrate*, m. 101-2°, 50); $Ph(CH_2)_3CH_2CH_2NEt_2$, $b_{0.1}$ 141-6° (*picrate*, m. 66-8°, 10.5); *N-aryl-2-(1-piperidino)ethyl ethers*, $b_{0.1}$ 184-5°, 3.5°, 10.5); *N-aryl-2-(1-piperidino)ethyl ethers*, $b_{0.1}$ 166-8° (*HCl salt*, m. 169-9.5°; *HBr salt*, m. 144.5°; *methiodide*, m. 187-8°; *ethosulfate*, m. 124-5°, 0.0003-0.018, 100); $Ph_2CHOCH_2CH_2NEt_2$, $b_{0.1}$ 179-81° (*di-HCl salt*, m. 208-8.5°, 0.220, 100); $Ph_2CHOCH_2CH_2NEt_2$·*HCl*, m. 141°, 0.03, 87.5; $Ph_2COCH_2CH_2NEt_2$, $b_{0.1}$ 200-6° (*HCl salt*, m. 158.5-60.5°, 1; *dl-1,2-diphenyl-1-(2-dimethylaminoethoxy)ethane*, $b_{0.1}$ 155-65° (*HCl salt*, m. 129°, 2.5); *dl-1,2-diphenyl-1-(2-diethylaminoethoxy)-ethane*, $b_{0.1}$ 169-71° (*HCl salt*, m. 116-17°, 11; *dl-1,2-diphenyl-1-[2-(1-piperidino)ethoxy]ethane*, $b_{0.1}$ 190-5° (*HCl salt*, m. 121-4°, 0.220, 80); *benhydryl 2-(1-piperidino)ethyl sulfide-HCl*, m. 170-1°, 1; *benhydryl 2-diethylaminoethyl sulfide-HCl*, m. 100-5°, 0.5, 242. D. A. S.

C.A.

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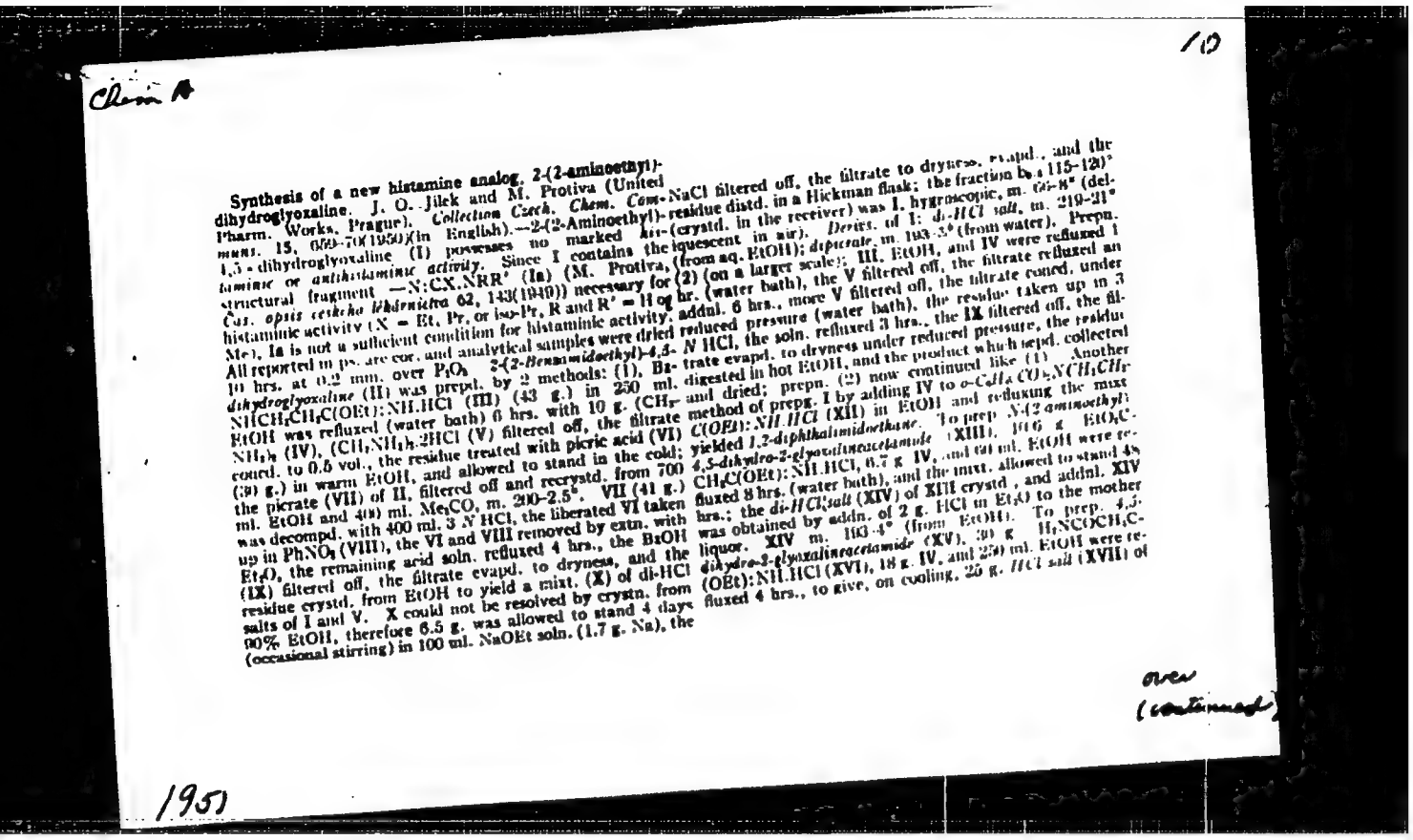
Antihistamine substances. X. Polycyclic analogs of benzhydryl ethers. J. O. Jilek, J. Urban, and M. Protiva. *Chem. Listy* 43, 56–8(1949); cf. *C.A.* 43, 3810h and preceding abstr.—The following basic ethers are prepd. by the usual methods. *α-(1-Naphthyl)benzyl ethers: 2-dimethylaminoethyl*, 70% yield, b$_{0.5}$ 170–92° (*HCl salt*, m. 182–3°; picrate, m. 148.5°); *2-diethylaminoethyl homolog*, 50%, b$_{0.4}$ 199–201° (*HCl salt*, m. 140–1°); *2-(1-piperidyl)ethyl*, 47%, b$_{0.4}$ 223–6°. *9-Fluorenyl ethers: 2-dimethylaminoethyl*, 60%, b$_{0.3}$ 166–70° (*methiodide*, m. 211°); *2-diethylaminoethyl*, 73%, b$_{0.3}$ 170–5° (*HCl salt*, m. 141–1.5°); *2-(1-piperidyl)ethyl*, b$_{0.3}$ 180–205° (*HCl salt*, m. 161–2°); *2-(4-morpholinyl)ethyl*, b$_{0.3}$ 200–20° (*HCl salt*, m. 177°). The antihistaminic activities of these products are relatively low (20–100 times less than Benadryl). **XI. Ethers derived from substituted 2-aminocyclohexanols.** V. Reficha. *Ibid.* 109–13.—*2-Dimethylaminocyclohexanol* (I), prepd. by heating equimol. quantities of cyclohexene oxide and Me_2NH in EtOH 12 hrs. at 100°, b. 198–202° (yield 80%). In a similar manner have been prepd. the following *analogs* of I: *2-diethylamino* (II), 15 hrs. at 120–60°, 85%, b. 223–7° (*HCl salt*, m. 172.5–3°); *2-(1-piperidyl)* (III), 81%, b$_{14}$ 131–5° (*HCl salt*, m. 280–2° (decompn.); *picrate*, m. 134–5°); *2-(4-morpholinyl)*, 92%, b$_{10}$ 145–7°, m. 38–9° (*HCl salt*, m. 225–6°; *picrate*, m. 145–6°). Heating 1 mol. 2-chlorocyclohexanol with 2 mols. Et_2NH in BuOH 14 hrs. at 150–60° also gave 62% II, b. 233–30° (*HCl salt*, m. 172–2.5°). II with $SOCl_2$ in C_6H_6 gives 65% of the unstable *2-diethylaminocyclohexyl chloride* (IV), b$_{14}$ 103–6° (cf. *C.A.* 40, 2151°). Similarly III gives *2-(1-piperidyl)cyclohexyl chloride*, b$_{14}$ 145–7° (*HCl salt*, m. 195–6°). To 0.95 g. Na in 30 ml. EtOH are added 3.8 g. phenol and then 7.5 g. IV in EtOH, the mixt. refluxed 6 hrs., the EtOH evapd., the residue extd. with dil. HCl, the base liberated by NaOH, extd. with Et_2O, and the Et_2O soln. dried and distd. to give 23% *1-phenoxy-2-(diethylamino)cyclohexane*, b$_{14}$ 154–8° (*picrate*, m. 116–16°). Similarly have been prepd. *1-thymyloxy-2-(diethylamino)cyclohexane*, 24%, b$_{14}$ 168–62° (*HCl salt*, m. 230–1°; *picrate*, m. 137.5–8°), and, from $PhCH_2ONa$ and IV in C_6H_6, 1-benzyloxy-2-(diethylamino)cyclohexane (V), yield 17%, b$_{14}$ 146–51° (*picrate*, m. 106–7°). V was obtained also in 38% yield from the Na deriv. of II and $PhCH_2Cl$ in C_6H_6. To 21.5 g. I and 20.6 g. dried Na_2CO_3 was added slowly with stirring at 120° 37.1 g. Ph_2CHBr, the mixt. heated at 120–40° 4 hrs., the mixt. diluted with C_6H_6, the ppted. NaBr filtered off, the layers extd. with dil. HCl, liberated again with NaOH, extd. with Et_2O, and the Et_2O soln. dried and distd. to give 54% *1-benzhydryloxy-2-(dimethylamino)cyclohexane*, b$_{14}$ 177–84° (*HCl salt*, m. 160–1°). The following *derivs. of 1-benzhydryloxycyclohexane* were prepd. similarly: *2-diethylamino*, 30%, b$_{14}$ 182–4° (*HCl salt*, m. 181.5–3°); *2-(1-piperidyl)*, 37%, b$_{14}$ 203°, m. 51–2° (*HCl salt*, m. 193–2.5°; *methiodide*, m. 146–7°); *2-(4-morpholinyl)*, 21%, b$_{14}$ 215–18°, m. 49–51° (*HCl salt*, m. 177–9°). All the products are assumed to have the trans configuration. They show a 50–100 times lower level of antihistamine activity than benadryl. **XII. Piperidine and morpholine analogs of antergan, pyribenzamine, and neoantergan.** V. Reficha and M. Protiva. *Ibid.* 176–9.—From $PhNHCH_2Ph$, *2-benzamidopyridine* (*picrate*, m. 164.5°), and *2-(p-methoxybenzamido)pyridine* (*picrate*, m. 158°) the compds. listed below have been prepd. by the $NaNH_2$ condensation with *2-(1-piperidyl)ethyl chloride*, *2-(4-morpholinyl)ethyl chloride* and $Me_2NCH_2CH_2Cl$ in C_6H_6 (cf.

(over)

C.A.

SOME SUBSTITUTED 4-ETHOXYBENZAMIDINES. J. O. Jílek, M. Porobička, and M. Protiva. Chem. Listy 43, 211-13 (1949).---p-Ethoxybenzamidine, m. 265.5-6.5° (from ether-EtOH), was prepd. from p-$EtOC_6H_4CN$ through Et p-ethoxybenzimidate-HCl (I), m. 207°. N-Methy-p-ethoxybenzamidine, prepd. from 1 mol. I and 8 moles $MeNH_2$ (30 hrs. at room temp.), m. 166-6.5°. The N, N-di-Me compd., prepd. analogously from I and Me_2NH, m. 227-8°(from EtOH-Et_2O). p-(2-Hydroxyethoxy)benzonitrile (II), obtained from 0.25 mole Na salt of p-$EtOC_6H_4CN$ and 0.25 mole $HOCH_2CH_2Cl$ (yield, 73%), m. 87.5°(from C_6H_6). p-(2-Hydroxyethoxy) benzamidine (III), m. 237°(from 90% EtOH),(HCl salt, m. 232-6°), was prepd. from II through Et p-(2-hydroxyethoxy)benzimidate-HCl, m. 127-8° (decompn.) (overall yield, 75%). p-(2-Chloroethoxy)benzamidine (IV) was obtained from III. HCl with $COCl_2$ or $POCl_3$. IV. HCl, m. 259-60° (from MeOH). None of the compds. described showed antihistamine properties.

M. Hudický



Chem A

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Synthesis of a new histamine analog, 2-(2-aminoethyl)-1,5-dihydroglyoxaline. J. O. Jilek and M. Protiva (United Pharm. Works, Prague). *Collection Czech. Chem. Commun.* 15, 669-70(1950)(in English).—2-(2-Aminoethyl)-1,5-dihydroglyoxaline (I) possesses no marked *histaminic* or *antihistaminic activity*. Since I contains the structural fragment —N:CX.NRR' (Ia) (M. Protiva, *Cas. lekaru ceskych* 62, 143(1949)) necessary for histaminic activity (X = Et, Pr, or iso-Pr, R and R' = H or Me), Ia is not a sufficient condition for histaminic activity. All reported m.ps. are cor. and analytical samples were dried 10 hrs. at 0.2 mm. over P_2O_5. *2-(2-Benzamidoethyl)-4,5-dihydroglyoxaline* (II) was prepd. by 2 methods: (1), $BzNHCH_2CH_2C(OEt):NH.HCl$ (III) (43 g.) in 250 ml. EtOH was refluxed (water bath) 6 hrs. with 10 g. $(CH_2NH_2)_2$ (IV), $(CH_2NH_2)_2.2HCl$ (V) filtered off, the filtrate coned. to 0.5 vol., the residue treated with picric acid (VI) (30 g.) in warm EtOH, and allowed to stand in the cold; the picrate (VII) of II, filtered off and recrystd. from 700 ml. EtOH and 400 ml. Me_2CO, m. 200–2.5°. VII (41 g.) was decompd. with 400 ml. 3 *N* HCl, the liberated VI taken up in $PhNO_2$ (VIII), the VI and VIII removed by extn. with Et_2O, the remaining acid soln. refluxed 4 hrs., and the (IX) filtered off, the filtrate evapd. to dryness, and the residue crystd. from EtOH to yield a mixt. (X) of di-HCl salts of I and V. X could not be resolved by crystn. from 90% EtOH, therefore 6.5 g. was allowed to stand 4 days (occasional stirring) in 100 ml. NaOEt soln. (1.7 g. Na), the NaCl filtered off, the filtrate to dryness, evapd., and the residue distd. in a Hickman flask; the fraction b.a 115–12)° (from aq. EtOH); *dipicrate*, m. 193–3° (from water). Prepn. (2) (on a larger scale): III, EtOH, and IV were refluxed 1 hr. (water bath), the V filtered off, the filtrate coned. under reduced pressure (water bath), the residue taken up in 3 *N* HCl, the soln. refluxed 3 hrs., the IX filtered off, the filtrate evapd. to dryness under reduced pressure, the residue digested in hot EtOH, and the product which sepd. collected and dried; prepn. (2) now continued like (1). Another method of prepg. I by adding IV to *o-CellsCO2NCH2CH2C(OEt):NH.HCl* (XII) in EtOH and refluxing the mixt. yielded *1,2-diphthalimidoethane* (XIII), 10.6 g. EtO_2C-*4,5-dihydro-2-glyoxalinoacetamide* (XIV) of XII crystd., and addnl. XIV was obtained by addn. of 2 g. HCl in Et_2O to the mother liquor. XIV m. 103–4° (from EtOH). To prep. 4,5-*dihydro-2-glyoxalinoacetamide* (XV), 30 g. H_2NCOCH_2C-$CH_2C(OEt):NH.HCl$ (XVI), 18 g. IV, and 250 ml. EtOH were refluxed 8 hrs. (water bath), and the mixt. allowed to stand 48 hrs.; the *di-HCl salt* (XIV) of XIII crystd., and addnl. XIV fluxed 4 hrs., to give, on cooling, 25 g. *HCl salt* (XVII) of

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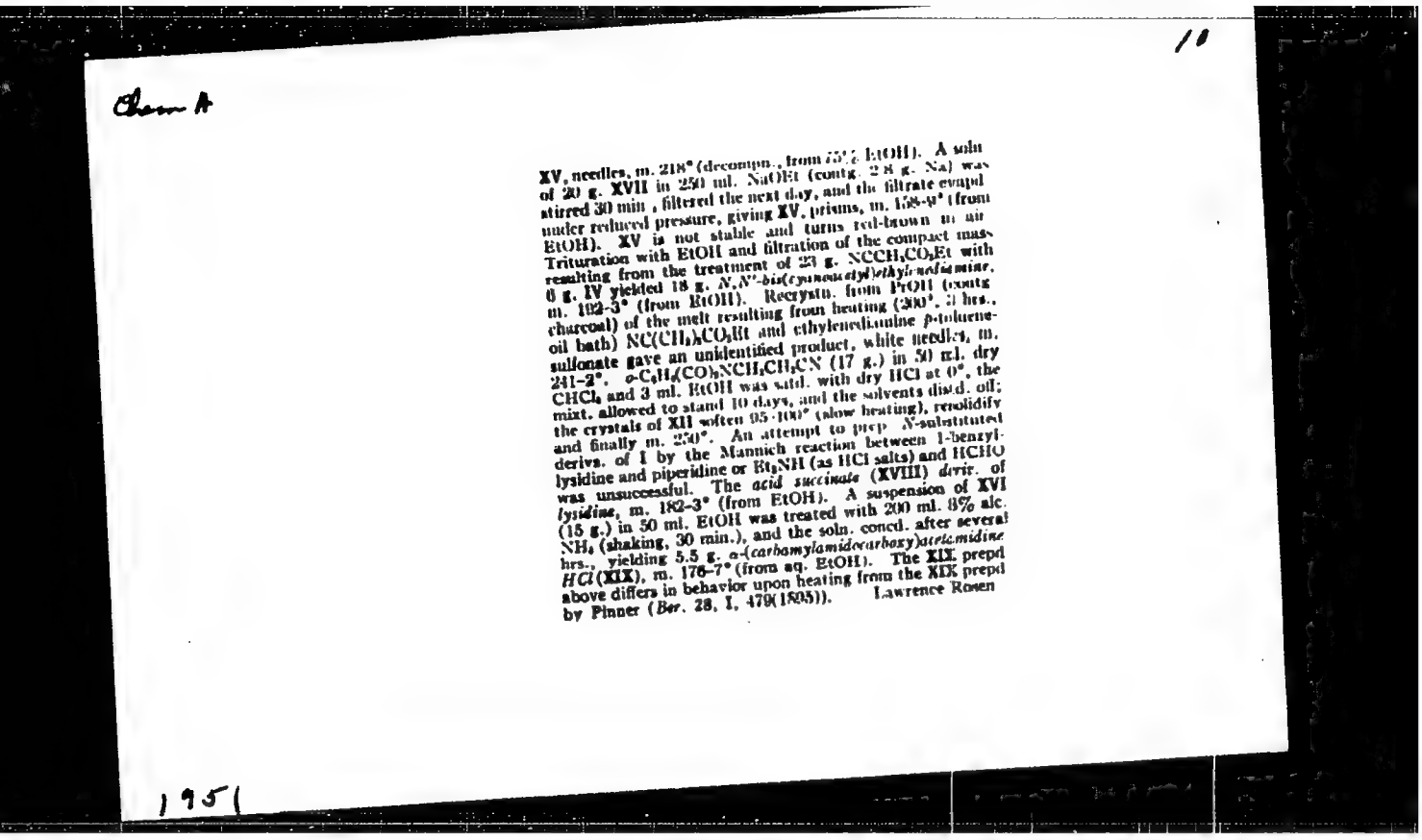

Chem A

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XV, needles, m. 218° (decompn., from 75% EtOH). A soln of 20 g. XVII in 250 ml. NaOEt (contg. 2.8 g. Na) was stirred 30 min., filtered the next day, and the filtrate evapd under reduced pressure, giving XV, prisms, m. 158–9° (from EtOH). XV is not stable and turns red-brown in air. Trituration with EtOH and filtration of the compact mass resulting from the treatment of 23 g. $NCCH_2CO_2Et$ with 6 g. IV yielded 18 g. *N,N'-bis(cyanoacetyl)ethylenediamine*, m. 192–3° (from EtOH). Recrystn. from PrOH (contg charcoal) of the melt resulting from heating (300°, 3 hrs., oil bath) $NC(CH_2)_3CO_2Et$ and ethylenediamine *p*-toluenesulfonate gave an unidentified product, white needles, m. 241–2°. $o\text{-}C_6H_4(CO)_2NCH_2CH_2CN$ (17 g.) in 50 ml. dry $CHCl_3$ and 3 ml. EtOH was satd. with dry HCl at 0°, the mixt. allowed to stand 10 days, and the solvents distd. off; the crystals of XII soften 95–100° (slow heating), resolidify and finally m. 250°. An attempt to prep. *N*-substituted derivs. of I by the Mannich reaction between 1-benzylysidine and piperidine or Et_2NH (as HCl salts) and HCHO was unsuccessful. The *acid succinate* (XVIII) *deriv.* of *lysidine*, m. 182–3° (from EtOH). A suspension of XVI (15 g.) in 50 ml. EtOH was treated with 200 ml. 8% alc. NH_3 (shaking, 30 min.), and the soln. concd. after several hrs., yielding 5.5 g. *α-(carbomylamidocarboxy)acetamidine HCl* (XIX), m. 176–7° (from aq. EtOH). The XIX prepd above differs in behavior upon heating from the XIX prepd by Pinner (*Ber.* 28, I, 479(1895)). Lawrence Rosen

1951

CA

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1-Carbethoxymethyl-3-acetylpyridinium bromide. J. O. Hick. *Chem. Listy* 44, 41(1950).—3-Acetylpyridine (1.8 g.) and 2.3 g. $BrCH_2CO_2Et$ were heated 30 min. with stirring in 2 ml. C_6H_6 on a steam bath giving 3.3 g. *1-carbethoxymethyl-3-acetylpyridinium bromide*, m. 124–6°, after a few crystns. from Me_2CO. M. Hudlický

CA

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N-Substituted 4-amino-3,3-diphenyl-2-butanones. J. O. Jilek and M. Protiva. *Chem. Listy* 44, 49-51(1950). 4-(*1-Piperidyl*)- (I), 4-(*4-morpholinyl*)- (II), and 4-*dimethylamino*-3,3-*diphenyl*-2-*butanones* (III) were prepd. by the Mannich reaction from Ph_2CHAc (IV). To prep. IV, Ph_2CH_2Ac was brominated in ether to give 93% $Ph_2CHBrAc$, which gave 65% IV by heating with C_6H_6 and $AlCl_3$. Another method for prepg. IV was the reaction of $Ph_2CHCOCl$ with MeCdCl prepd. from MeMgBr and $CdCl_2$ (yield 59%). $C_5H_{11}N.HCl$ (3.3 g.), 5.7 g. IV, 1.2 g. $(CH_2O)_n$, and 4 drops concd. H_2SO_4 were refluxed on the steam bath 1 hr., 0.75 g. $(CH_2O)_n$ added, heating continued 2 hrs., and the mixt. poured into 100 ml. Me_2CO to give 2.85 g. I, m. 195-6°; an addnl. 1.5 g. was obtained from the mother liquors. The yield of I, m. 204-5° (from EtOH), b$_{0.4}$ 153-6° (decompn.), was 51%. II (45%), m. 192.5°, was prepd. analogously from morpholine-HCl. III (10%), m. 165-6° (from acetone), was prepd. from $Me_2NH.HCl$. A better yield (38%) was obtained when 7 g. IV, 4 g. $Me_2NH.HCl$, and 1.5 g. $(CH_2O)_n$ were refluxed 45 min. at 140° in 20 ml. iso-AmOH and the mixt. treated with an equal vol. of ether. The salt was purified as free III, liberated by NaOH.

M. Hudlický

JILEK, JIRI O.

Chemical Abst.
Vol. 48 No. 5
Mar. 10, 1954
Organic Chemistry

Antihistamine substances. XXVI. Some new heterocyclic derivatives of ethylenediamine. Miroslav Protiva, Jiří O. Jílek, Zdeněk J. Vejdělek, and Otto Exner (Pharm.-Biochem. Research Inst., Prague, Czech.). *Chem. Listy* 46, 551–4(1952); cf. *C.A.* 47, 4300*a*; 48, 146*c*.—Alkylation of 4-phenyl-1,2,3,4-tetrahydroquinaldine (I), *acridan* (II), and *2-phenyl-3-methyl-4-azaindole* (III) with *N*-substituted aminoalkyl chlorides gave new heterocyclic derivs. of $(CH_2NH_2)_2$, of which only acridan derivs. showed antihistamine activity. 4-Phenylquinaldine (10 g.) reduced with 16.5 g. Na in 165 ml. boiling BuOH gave, through its HCl salt, m. 209–15°, 3.7 g. (37%) I, m. 64–7° (from EtOH). II, m. 168–70°, was prepd. in 71% yield by the reduction of 9-acridanone with Na in AmOH. For the prepn. of III, 3-nitro-2,6-lutidine, m. 37°, b. 220–30°, was hydrogenated over Raney Ni to give 70% 3-amino-2,6-lutidine, m. 123°, b. 128–35°; this treated with BzCl yielded 70% 3-benzamido-2,6-lutidine, m. 171°, which was cyclized to III, m. 280° (decompn.), with NaOEt in 71% yield. I, II, and III with $NaNH_2$ and (alkylamino)-alkyl chlorides gave the following *N*-derivs. of I (% yield and b.p.): I, $Me_2NCH_2CH_2$, 68, $b_{0.4}$ 150–60° (HCl salt, m. 215–17°); $Et_2NCH_2CH_2$, 33, $b_{0.4}$ 165–75° (HCl salt, m. 102.5°); (3-piperidinoethyl), 75, $b_{0.4}$ 180–200° (HCl salt, m. 239–40°); (2-morpholinoethyl), 27, b_4 180–200° (HCl salt, m. 225–7.5°). Derivs. of II: $Me_2NCH_2CH_2$ (IV), 45, b_1 198–200° (picrate, m. 165–6°); $Et_2NCH_2CH_2$, 58, b_1 220° (picrate, m. 260–71°); Me_2NCH_2CHMe (V), 61, b_1 183–4°; Et_2NCH_2CHMe, 35, $b_{0.4}$ 170–1° (picrate, m. 158°). Deriv. of III: $Me_2NCH_2CH_2$, 45, $b_{0.4}$ 200–4° ($2HCl.2H_2O$, m. 213–14°; dipicrate, m. 212°). The disuccinates of IV and V showed 7 times and 2.5 times the antihistamine activity of Benadryl. M. Hudlický

JILEK, J. O.

(2)

Protiva, M., and Jilek, J. O.: Zaklady pracovni techniky v organickocheinicke laboratori. Prague: SNTL. 1953. 120 pp. Kcs. 8.20. . Reviewed in *Chem. Listy* 48, 324 (1954).

JILEK, J.O.; BOROVICKA, M.; PROTIVA, M.

Synthetic antispasmodics. Part 5. Cyclic analogues of substances of the 3,3-diphenylpropylamine series [in English with summary in Russian]. Sbor.Chekh.khim.rab. 18 no.2:257-269 Ap '53. (MLRA 7:6)

1. Pharmaceutical and Biochemical Research Institute, Prague.
(Antispasmodics)

JILEK, J., PROTIVA, M.

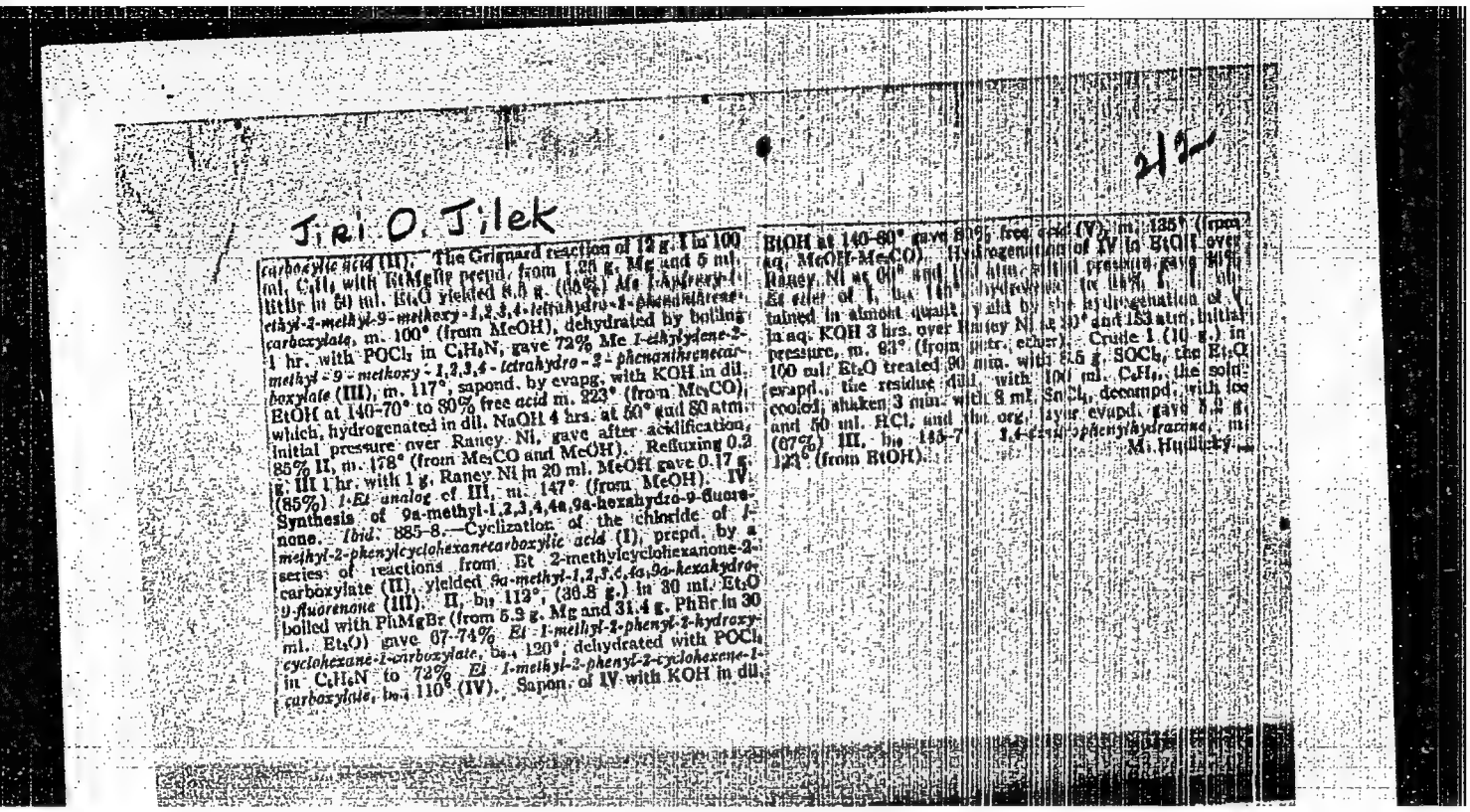
"Parasympathomimetics. I." "Synthetic spasmolytics." VII. "Synthesis of a new sulphur analogue of acetylchlorine and sulphonium salts of the "Tifene" type. p. 219. (CHEMICKE LISTY, Vol. 47, #2, Feb. 1953, Czechoslovakia)

SO: Monthly List of East European Accessions, Vol. 2, #8 Library of Congress, August 1953, Uncl.

JILEK, JIRI O.

CZECH

Synthetic experiments in the estrogenic hormone series. II. Synthesis of crystalline ethyl 2-methyl-2-carbethoxy-5-(4-methoxyphenyl)cyclohexan-1-one-6-acetate. Jiří O. Jilek, Vladislav Šimák, and Miroslav Protiva (Farm. biochem. výzkumný ústav, Prague, Czech.). *Chem. Listy* 47, 874–80(1953); *Collection Czechoslov. Chem. Communs.* 19, 333–9 (1954)(in English); cf. *C.A.* 47, 8034c.—The Friedel-Crafts reaction of *Et 2-methyl-2-carbethoxy-5-cyclohexen-1-one-6-acetate* (I) with MeOPh gave *Et 2-methyl-2-carbethoxy-5-(p-methoxyphenyl)cyclohexan-1-one-6-acetate* (II) which was transformed to *2-methyl-5-(p-methoxyphenyl)-1-cyclohexanone-6-acetic acid* (III). 2-Carbethoxycyclohexanone (75 g.), 10 g. Na dust, and 250 ml. C_6H_6 refluxed 4 hrs., the mixt. treated with 75 g. $BrCH_2CO_2Et$, refluxed 6 hrs., decompd. with 200 ml. dil. HCl, and the C_6H_6 layer washed, dried, and distd. gave 84 g. (74%) *Et 2-carbethoxycyclohexanone-2-acetate* (IV), b_8 160–68°; $ClCH_2CO_2Et$ gave only 60% yield. Similarly was prepd. the *di-Me ester* (42%), b_{4-5} 153–5°. IV (24 g.) refluxed 8 hrs. with 2.4 g. Na and 35 ml. EtOH gave, after acidification and extn. 13 g. (54%) *Et 2-carbethoxycyclohexanone-6-acetate* (V), $b_{0.4}$ 130–45°. V (13 g.) refluxed 7 hrs. with 70 ml. C_6H_6 and 1.2 g. Na dust, cooled, treated with 10 ml. MeI, let stand 2 hrs. at room temp., then refluxed 2 hrs., yielded 8.5 g. (63%) *Et 2-methyl-2-carbethoxycyclohexanone-6-acetate* (VI), $b_{0.3}$ 110–20°, also obtained (b_3 166–7°), without isolating V, by refluxing 20 g. IV 8 hrs. with 2 g. Na in 30 ml. EtOH. Bromination of VI in CCl_4 yielded 84% *Et 2-methyl-2-carbethoxy-6-bromocyclohexanone-6-acetate* (VII), $b_{0.1}$ 144–7°. Dehydrobromination of VII by refluxing with Me_2N [illegible] with collidine gave, resp., 78% and 85% [illegible], $b_{0.1}$ 147–51° [illegible] g.) and 70 ml. PhOMe treated at −5 to 0° with 30 g. $AlCl_3$, yielded 16 g. recd. with HCl and worked up, ed 1 and 6 g. (90%) II, $b_{0.4}$ 200–10°, m. 84° (from C_6H_{14}). Sapon. of 0.4 g. II by refluxing 1 hrs. with aq. NaOH gave 0.3 g. II, m. 138°. Sapon. of IV with NaOH in MeOH gave (1)% *1,2,6-hexanetricarboxylic acid*, m. 80–2°, esterified with MeOH and HCl to *tri-Me ester* (VIII), b_3 162–8°. Refluxing 4.9 g. VIII with 0.5 g. Na dust and 10 ml. C_6H_6 18 hrs. in a N atm., the mixt. with 10 ml. C_6H_6, and methylating in 6 hrs., with 10 ml. MeI gave 1 g. (65%) *Me 3-methyl-2-carbomethoxycyclohexanone-6-acetate*, $b_{0.4}$ 115–24°, which on bromination in CCl_4 yielded *Me 2-methyl-1-carbomethoxy-1-bromocyclohexanone-6-acetate*, m. 90–3°. III. Synthesis of racemic 1-ethyl-2-methyl-9-methoxy-1,2,3,4-tetrahydro-2-phenanthrenecarboxylic acid. Miroslav Protiva and Ludvík Nosák, *Chem. Listy* 47, 831–4.—*Me 1-oxo-2-methyl-9-methoxy-1,2,3,4-tetrahydro-2-phenanthrenecarboxylate*, m. 136–7° (I), was obtained by the following series of reactions: 1-naphtho— $1\text{-}C_{12}H_7OMe$, b_{10} 140° (81%) — *4,4-MeOC$_6$H$_4$COCH$_2$CO$_2$H*, m. 172° (quant.), — *4-MeOC$_6$H$_4$CH$_2$CH$_2$CO$_2$H*, m. 120° (70%) — *1-oxo-9-methoxy-1,2,3,4-tetrahydrophenanthrene*, m. 98–100° (80%) — *Me 1-oxo-9-methoxy-1,2,3,4-tetrahydro-2-phenanthreneglyoxylate*, m. 123–4° (90–5%) — *Me 1-oxo-9-methoxy-1,2,3,4-tetrahydro-2-phenanthrenecarboxylate*, m. 118–21° (60%). I gave estrogenically inactive *1-ethyl-2-methyl-9-methoxy-1,2,3,4-tetrahydro-2-phenanthrene*



J. R. O. Jilek

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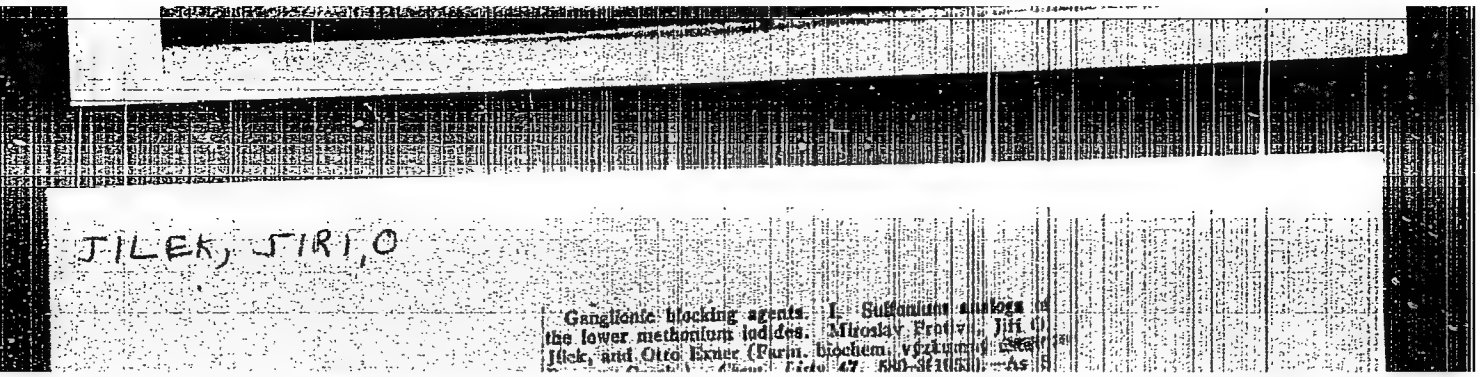
carboxylic acid (II). The Grignard reaction of 12 g. I in 100 ml. C_6H_6 with EtMgBr prepd. from 1.26 g. Mg and 5 ml. EtBr in 50 ml. Et_2O yielded 8.5 g. (56%) *Me 1-hydroxy-1-ethyl-2-methyl-9-methoxy-1,2,3,4-tetrahydro-1-phenanthrene-carboxylate*, m. 100° (from MeOH), dehydrated by boiling 1 hr. with $POCl_3$ in C_5H_5N, gave 72% *Me 1-ethylidene-2-methyl-9-methoxy-1,2,3,4-tetrahydro-2-phenanthrenecarboxylate* (III), m. 117°, sapond. by evapg. with KOH in dil. EtOH at 140–70° to 80% free *acid* m. 223° (from Me_2CO), which, hydrogenated in dil. NaOH 4 hrs. at 50° and 80 atm. initial pressure over Raney Ni, gave after acidification, 85% II, m. 178° (from Me_2CO and MeOH). Refluxing 0.2 g. III 1 hr. with 1 g. Raney Ni in 20 ml. MeOH gave 0.17 g. (85%) *1-Et analog* of III, m. 147° (from MeOH). IV. Synthesis of *9a-methyl-1,2,3,4,4a,9a-hexahydro-9-fluorenone*. *Ibid.* 885–8.—Cyclization of the chloride of *1-methyl-2-phenylcyclohexanecarboxylic acid* (I), prepd. by a series of reactions from Et 2-methylcyclohexanone-2-carboxylate (II), yielded *9a-methyl-1,2,3,4,4a,9a-hexahydro-9-fluorenone* (III). II, bp. 112°, (36.8 g.) in 30 ml. Et_2O boiled with PhMgBr (from 5.3 g. Mg and 31.4 g. PhBr in 30 ml. Et_2O) gave 67–74% *Et 1-methyl-2-phenyl-2-hydroxycyclohexane-1-carboxylate*, bp. 120°, dehydrated with $POCl_3$ in C_5H_5N to 72% *Et 1-methyl-2-phenyl-2-cyclohexene-1-carboxylate*, bp. 110° (IV). Sapon. of IV with KOH in dil. EtOH at 140–80° gave 80% free *acid* (V), m. 135° (from aq. MeOH-Me_2CO). Hydrogenation of IV in EtOH over Raney Ni at 60° and [illegible] pressure gave 80% *Et ester* of I, bp. [illegible] hydrogenation of V obtained in almost quant. yield by the hydrogenation of V in aq. KOH 3 hrs. over Raney Ni at 50° and 153 atm. initial pressure, m. 93° (from petr. ether). Crude I (10 g.) in 100 ml. Et_2O treated 90 min. with 8.5 g. $SOCl_2$, the Et_2O evapd., the residue dild. with 100 ml. C_6H_6, the soln. cooled, shaken 3 min. with 8 ml. $SnCl_4$ decompd. with ice and 50 ml. HCl, and the org. layer evapd. gave 8.0 g. (67%) III, bp. 145–7° | 1,4-[illegible]-phenylhydrazine, m. 123° (from EtOH).

M. Hudlický



JILEK, JIRI, O

Ganglionic blocking agents. I. Sulfonium analogs of the lower methonium homologs. Miroslav Protiva, Jiri O. Jilek, and Otto Exner (Farm. biochem. výzkumný ústav, Prague 47, [illegible]).—As

EXNER, O.; SIMAK, V.; JILEK, J.O.; PROTIVA, M.

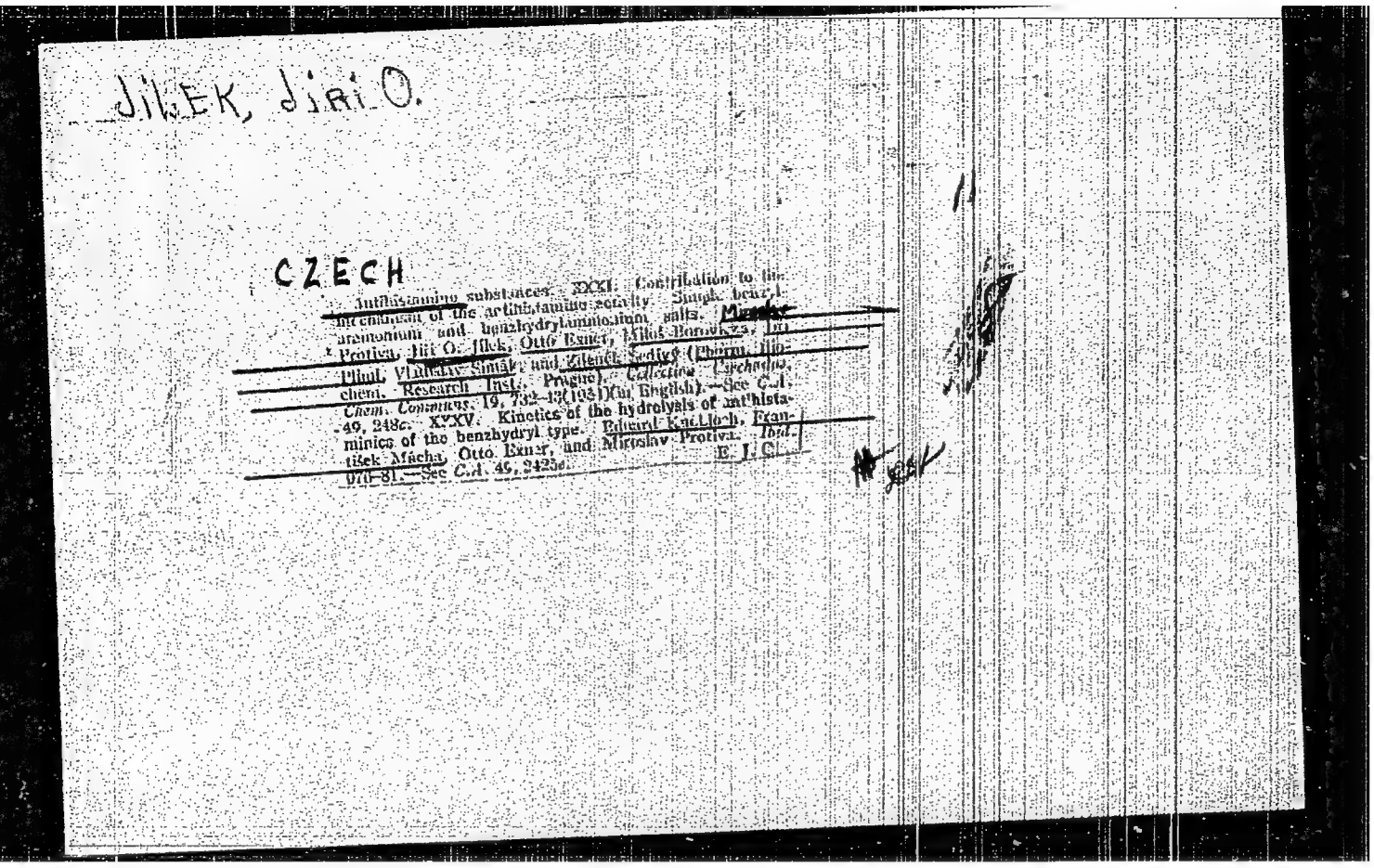
Synthesis in the estrogene hormone group. Part 1. p-methoxyphenylacetylene [in English with summary in Russian]. Sbor.Chekh.khim.rab. 19 no.2:330-332 Ap '54. (MLRA 7:6)

1. Pharmaceutical and Biological Research Institute, Prague.
(Estrogens)

JILEK, J.O.; SIMAK, V.; PROTIVA, M.

Synthesis in the estrogenic hormone group. Part 2. Synthesis of crystalline ethyl 2-methyl-2-carbethoxy-5-(4-methoxyphenyl) cyclohexan-1-one-6-acetate [in English with summary in Russian]. Sbor.Chekh.khim. rab. 19 no.2:333-339 Ap '54. (MLRA 7:6)

1. Pharmaceutical and Biochemical Research Institute, Prague.
(Estrogens)



JILEK, Jiri O.

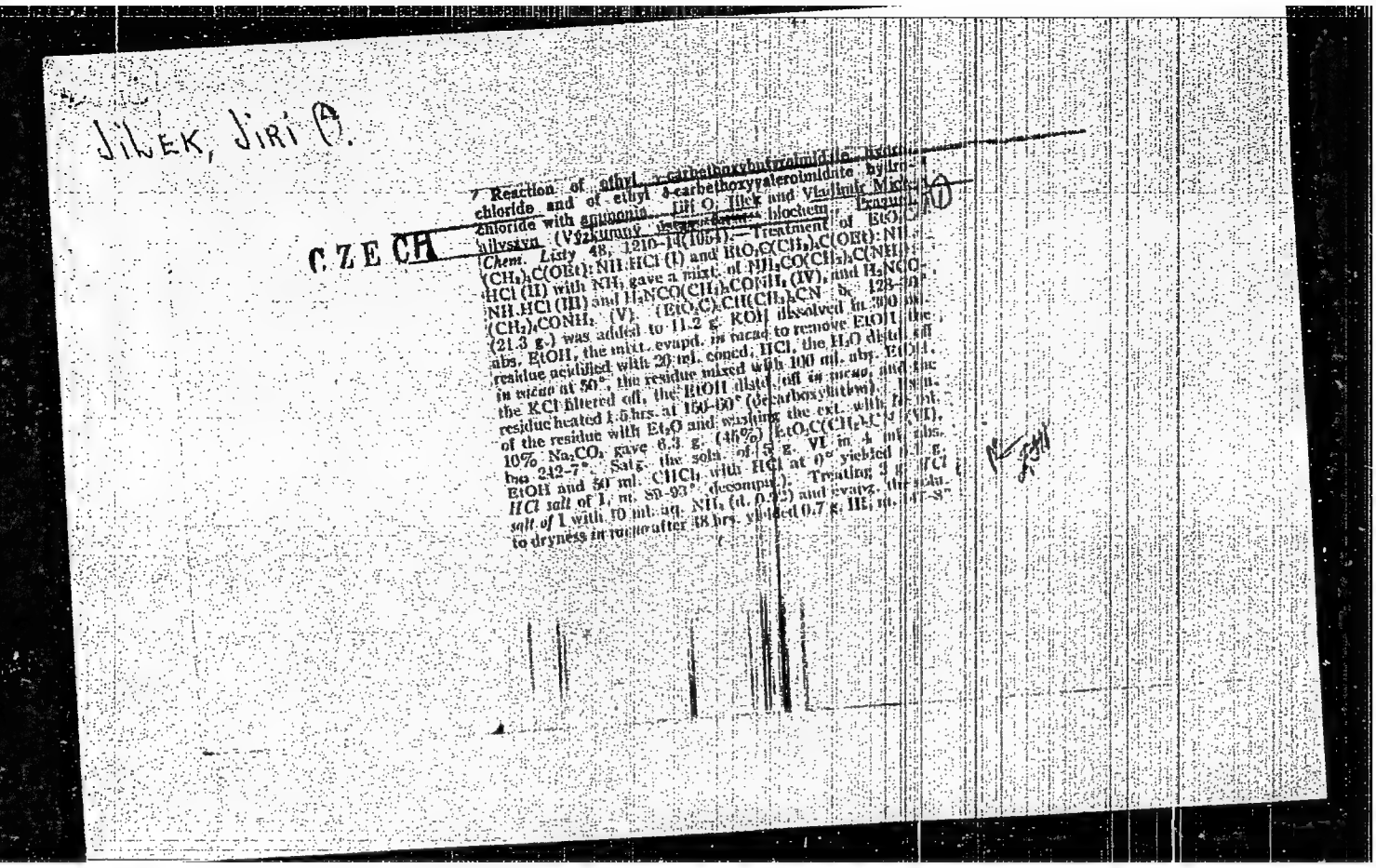
CZECH

Antihistaminic substances. XXI. Contribution to the mechanism of the antihistaminic activity. Simple benzhydrylammonium and benzhydrylammonium salts. Miroslav Protiva, Jiří O. Jilek, Otto Exner, Miloš Horáček, Jiří Pliml, Vladislav Simák, and Zdeněk Sedivý (Pharm. Biochem. Research Inst., Prague). *Collection Czechoslov. Chem. Communs.* 19, 732–42(1954)(in English).—See *C.A.* 49, 248c. XXXV. Kinetics of the hydrolysis of antihistaminics of the benzhydryl type. Eduard Kaclach, František Macha, Otto Exner, and Miroslav Protiva. *Ibid.* 970–81.—See *C.A.* 46, 9425d. E. J. C.

JILEK, J.; POMYKACEK, J.; PROTIVA, M.

"Antihistamine Substances. XXXVI. Preparation of Some P-Substituted Analogues of Antistine", P. 232, (CHEMICKE LISTY, Vol. 48, No. 2, Feb. 1954, Praha, Czechoslovakia)

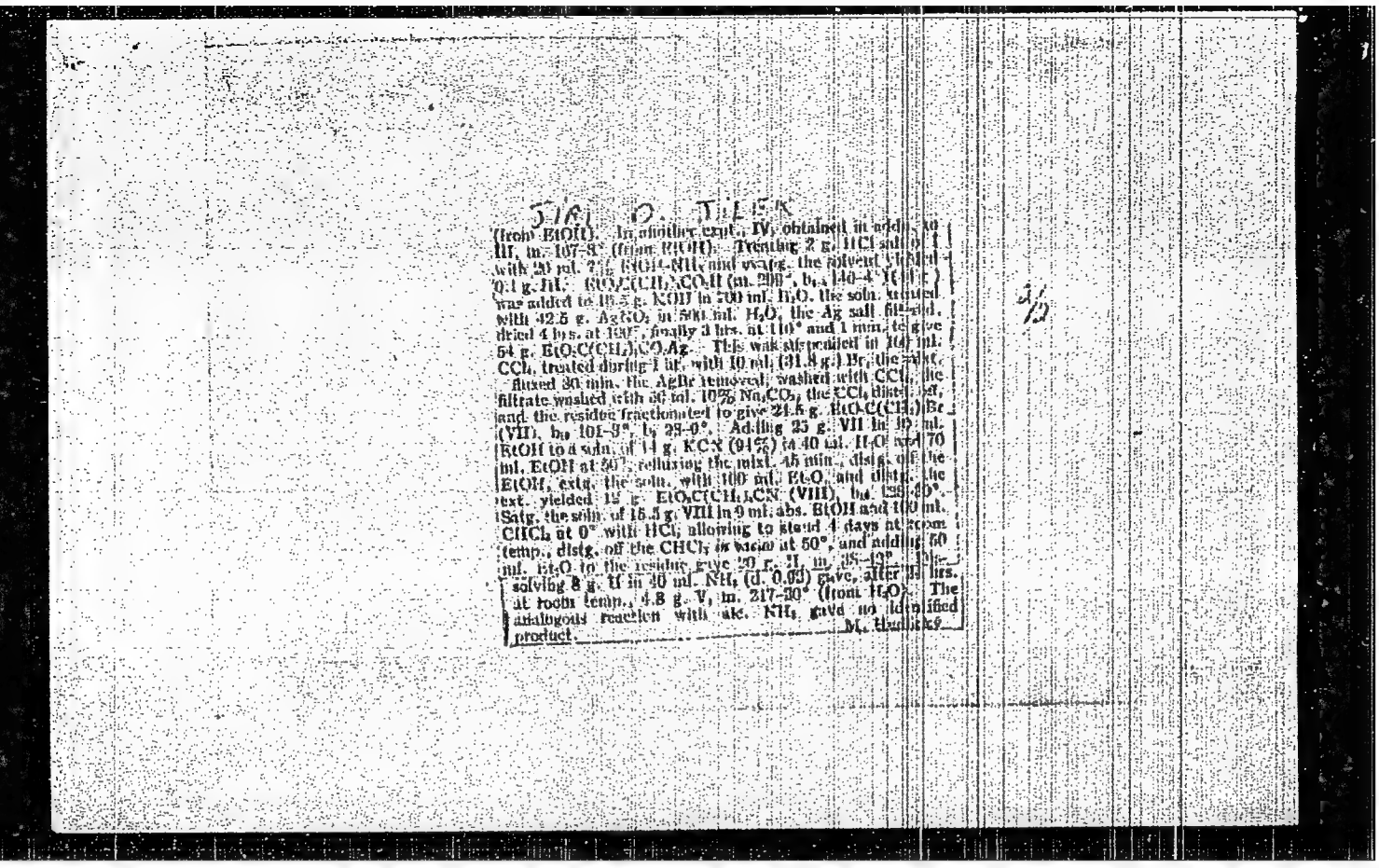
SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12, Dec. 1954, Uncl.



JILEK, JIRI O.

CZECH

7 Reaction of ethyl 3-carbethoxybutyrimidate hydrochloride and of ethyl 4-carbethoxyvaleroimidate hydrochloride with ammonia. Jiří O. Jilek and Vlastimil Mistr (Výzkumný ústav [illegible] biochem. [illegible], Prague). Collection Czechoslov. Chem. Listy 48, 1210-14(1954).—Treatment of EtO(CH2)3C(OEt):NH.HCl (I) and EtO2C(CH2)4C(OEt):NH.HCl (II) with NH3 gave a mixt. of NH2CO(CH2)3C(NH2):NH.HCl (III) and H2NCO(CH2)4C(NH2):NH.HCl (IV), and H2NCO(CH2)4CONH2 (V). (EtO2C)2CH(CH2)2CN (VI) (21.3 g.) was added to 11.2 g. KOH dissolved in 300 ml. abs. EtOH, the mixt. evapd. in vacuo to remove EtOH, the residue acidified with 20 ml. concd. HCl, the H2O distd. off in vacuo at 50°, the residue mixed with 100 ml. abs. EtOH, the KCl filtered off, the EtOH distd. off in vacuo, and the residue heated 1.5 hrs. at 150-60° (decarboxylation). From of the residue with Et2O and washing the ext. with 10% Na2CO3 gave 6.3 g. (46%) EtO2C(CH2)3C(NH2):NH, m.p. 242-7°. Satg. the soln. of 5.3 g. VI in 4 ml. abs. EtOH and 50 ml. CHCl3 with HCl at 0° yielded 7.1 g. HCl salt of I, m. 89-93° (decompn.). Treating 3 g. HCl salt of I with 10 ml. aq. NH3 (d. 0.92) and evapg. the soln. to dryness in vacuo after 48 hrs. yielded 0.7 g. III, m. 47-8°



5161 10. TILES K

(from EtOH). In another expt., IV, obtained in addn. 30 III, m. 107-8° (from EtOH). Treating 2 g. HCl salt 0.1 with 20 ml. 2% EtOH-NH3 and evapg. the solvent yielded 0.1 g. III. $(EtO_2C(CH_2)_4CO_2H$ (m. 200°, b$_{4}$ 140-4 was added to 18.5 g. KOH in 500 ml. H_2O, the soln. treated with 42.5 g. $AgNO_3$ in 500 ml. H_2O, the Ag salt filtered, dried 4 hrs. at 100°, finally 3 hrs. at 110° and 1 mm., to give 54 g. $EtO_2C(CH_2)_4CO_2Ag$. This was suspended in 300 ml. CCl_4, treated during 1 hr. with 10 ml. (31.8 g.) Br_2, the mixt. refluxed 30 min., the AgBr removed, washed with CCl_4, the filtrate washed with 50 ml. 10% Na_2CO_3, the CCl_4 distilled off, and the residue fractionated to give 21.5 g. $EtO_2C(CH_2)_4Br$ (VII), b$_{10}$ 101-3°, b$_{3}$ 93-9°. Adding 25 g. VII in 50 ml. EtOH to a soln. of 14 g. KCN (94%) in 40 ml. H_2O and 70 ml. EtOH at 50°, refluxing the mixt. 45 min., distg. off the EtOH, extg. the soln. with 100 ml. Et_2O, and distg. the ext. yielded 15 g. $EtO_2C(CH_2)_4CN$ (VIII), b$_{4}$ 128-30°. Satg. the soln. of 16.5 g. VIII in 9 ml. abs. EtOH and 100 ml. $CHCl_3$ at 0° with HCl, allowing to stand 4 days at room temp., distg. off the $CHCl_3$ in vacuo at 50°, and adding 50 ml. Et_2O to the residue gave 20 g. II, m. 38-40° [illegible] solving 8 g. II in 30 ml. NH_3 (d. 0.93) gave, after 24 hrs. at room temp., 4.8 g. V, m. 217-30° (from H_2O). The analogous reaction with alc. NH_3 gave no identified product. M. Hudlicky

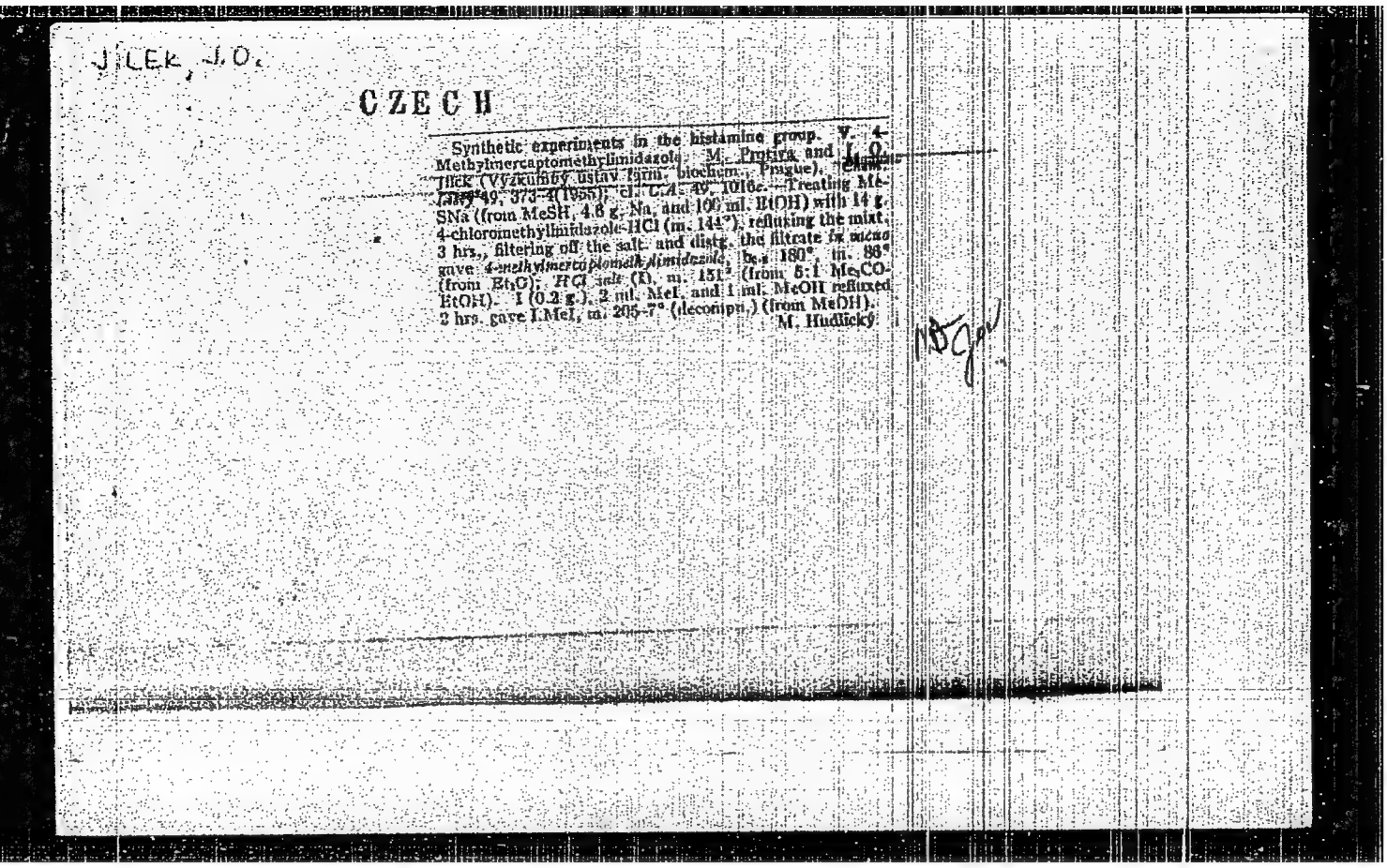
JIKEL, JIRI O.

V. Syntheses in estrogenic hormone group. VII. Crystalline 5-methyl-2-methyl-2-carbomethoxy-5-(*p*-methoxyphenyl)cyclohexanone-6-acetate and attempts to cyclize stereoisomeric 2-methyl-5-(*p*-methoxyphenyl)cyclohexanone-6-acetic acids. Jiří O. Jílek and Miroslav Protiva (Výzkumný ústav farm. biochem., Prague). *Chem. Listy* 49, 90–105 (1955); *Collection Czechoslov. Chem. Communs* 20, 765–76 (1955) (in German); cf. *C.A.* 49, 11508*e*.—Reesterification of 5 g. *Et 2-methyl-2-carbethoxy-5-(p-methoxyphenyl)cyclohexanone-6-acetate* (I), m. 84°, by refluxing 2 hrs. with 42.5 g. MeOH and 0.07 g. Na, decompg. the cooled mixt. with 750 ml. H_2O, extg. with Et_2O, evapg. the ext., and dissolving the residue (4.8 g.) in 20 ml. 80% aq. MeOH, and cooling yielded 4.2 g. *Me 2-methyl-2-carbomethoxy-5-(p-methoxyphenyl)cyclohexanone-6-acetate*, m. 97° (from 83% MeOH). Sapong. 35 g. liquid I (the mother liquor from the crystn. of I) (*C.A.* 49, 197*a*) by refluxing 10 hrs. with 28 g. NaOH in 250 ml. H_2O, dilg. the mixt. with 250 ml. H_2O, acidifying with HCl, filtering off the 6 g. of crystals (isomer IIa), m. 206–9° (from EtOH), and extg. the soln. with Et_2O gave 7 g. stereoisomer (IIb), m. 138° (from C_6H_6), of *2-methyl-5-(p-methoxyphenyl)cyclohexanone-6-acetic acid*. Adding 5 g. IIa to 25 g. polyphosphoric acid (160°), heating the mixt. 10 min. at 150°, cooling dilg. with 100 g. ice, and extg. with Et_2O gave 4 g. of a *lactone* (IIIa) of *3-methyl-6-(p-methoxyphenyl)-2-hydroxy-1-cyclohexene-1-acetic acid*, m. 91° (from 80% EtOH), which regenerated IIa on alk. hydrolysis. Similar treatment of 5 g. IIb by heating with 25 g. polyphosphoric acid 2 hrs. at 100° gave 4 g. crude and 2.2 g. pure stereoisomer (IIIb), b$_{0.4}$ 210–15°, alk. hydrolysis of which gave IIb. Catalytic hydrogenation of 2 g. IIIa in 40 ml. AcOH over Pd in the presence of 2 ml. 60% $HClO_4$ gave 0.6 g. of an isomer (IVaα) of a satd. *lactone of 3-methyl-6-(p-methoxyphenyl)-2-hydroxycyclohexaneacetic acid*, b$_{0.4}$ 185–90°, m. 93–4° (from 80% MeOH). Similar treatment of 2.2 g. IIIb in 50 ml. AcOH and 1.5 ml. $HClO_4$ in the presence of Pd catalyst (added twice during the hydrogenation) gave, after chromatography, 1.15 g. isomeric lactone (IVaβ), b$_{0.4}$ 195–200° (bath temp.). Reduction of 2 g. IIIa with 1.5 g. $LiAlH_4$ in 150 ml. Et_2O by refluxing 30 min. gave, after chromatography, 1.2 g. *3-methyl-5-(p-methoxyphenyl)-6-(3-hydroxyethyl)cyclohexanone*, b$_{0.4}$ 190–2°. IIa (1.8 g.) was transformed with 0.7 g. PCl_5 in 30 ml. C_6H_6 to its chloride which, treated with 1 ml. $SnCl_4$ 3 hrs. at 0°, gave, after decompn. with 15 ml. 3*N* HCl, 0.05 g. IIa and 0.10 g. of a *lactone* (Va) of *(3-methyl-6-(p-methoxyphenyl)-2-hydroxy-Δ^1,α-cyclohexaneacetic acid*, b$_{0.4}$ 200–10°, m. 116–17° (from MeOH), sapon. of which gave IIa. Catalytic hydrogenation of 190 mg. Va in 10 ml. AcOH with Pd and 0.1 ml. HCl gave 40 mg. of an isomer (IVaβ) of IVaα, m. 100–2° (from MeOH). Similar cyclization of 2 g. IIb yielded after ether extn. and chromatography 0.5 g. of a stereoisomeric lactone (Vb), b$_{0.4}$ 205–15°, m. 99–103° (from MeOH). Thermal cyclization of IIa by heating 0.4 g. IIa 10 min. at 240° gave, after distn. *in vacuo*, 250 mg. of a mixt. of IIIa and Va which regenerated IIa on alk. hydrolysis. Partial hydrolysis of the liquid portion of I (7.4 g.) in 20 ml. EtOH in 100 ml. EtOH gave 4.4 g. *2-methyl-2-carbethoxy-5-(p-methoxyphenyl)cyclohexanone-6-acetic acid* (VI), which treated in 100 ml. C_6H_6 at 0° with 4 g. PCl_5, the crude chloride shaken 15 min. at 0° with 4 ml. $SnCl_4$ and the mixt. decompd. with 20 g. ice and 20 ml. HCl, gave, after chromatography, 1.2 g. (probably) *3-methyl-2-carbethoxy-7-(p-methoxyphenyl)-1,9-dioxo-1,2,3,4,4a,9,10,10a-octahydrophenanthrene*, b$_{0.4}$ 200–10°. To verify the formation of unsatd. lactones, 4.8 g. cyclohexanone-2-acetic acid, m. 72–4°, was added to 22 g. polyphosphoric acid at 150°, and the mixt. heated 10 min. at 150°, decompd. with 100 g. ice, and extd. with ether to give 1.8 g. *lactone of 2-hydroxy-Δ^1-cyclohexaneacetic acid*, b$_{0.4}$ 102–5°, m. 20–2°. In connection with the syntheses, a mixt. of 13.8 g. *Et 3-methyl-2-carbethoxycyclohexanone-6-acetic acid* (*loc. cit.*) and 8.35 g. $BrCH_2CO_2Et$ was heated with 3.26 g. Zn, 80 ml. C_6H_6, and 70 ml. PhMe 4 hrs. at

(over) (1)

Jiri O. Jilek

100°, decompd. with 50 ml. 10% AcOH, and the org. layer washed with 50 ml. 10% NH_3 soln. and distd. to give 10.9 g. of a mixt. of stereoisomeric *2-methyl-2-carbethoxy-1,6-bis(carboethoxymethyl)cyclohexanols*, the dehydration of which (5 g.) by refluxing 3 hrs. with 50 ml. 85% HCO_2H gave 2 g. isomeric unsatd. esters, di-Et *3-methyl-3-carbethoxy-1-cyclohexene-1,2-diacetate*, and Et *2-methyl-2-carbethoxy-6-carbethoxymethyl-$\Delta^{1,a}$-cyclohexaneacetate*, $b_{0.5}$ 130-5°. Infrared spectra of IIIa, IVaa, and Va are given. M. Hudlický



JILEK, J.O.

CZECH

Synthetic experiments in the histamine group. V. 4-Methylmercaptomethylimidazole. M. Protiva and J.O. Jilek (Výzkumný ústav farm. biochem., Prague). Chem. listy 49, 373-4(1955). cf. C.A. 49, 1016c. Treating MeSNa (from MeSH, 4.8 g., Na, and 100 ml. EtOH) with 14 g. 4-chloromethylimidazole·HCl (m. 144°), refluxing the mixt. 3 hrs., filtering off the salt, and distg. the filtrate *in vacuo* gave 4-*methylmercaptomethylimidazole*, b.$_{4}$ 180°, m. 98° (from Et$_2$O). *HCl salt* (I), m. 151° (from 5:1 Me$_2$CO-EtOH). I (0.2 g.), 2 ml. MeI, and 1 ml. MeOH refluxed 2 hrs. gave I·MeI, m. 205-7° (decompn.) (from MeOH). M. Hudlický

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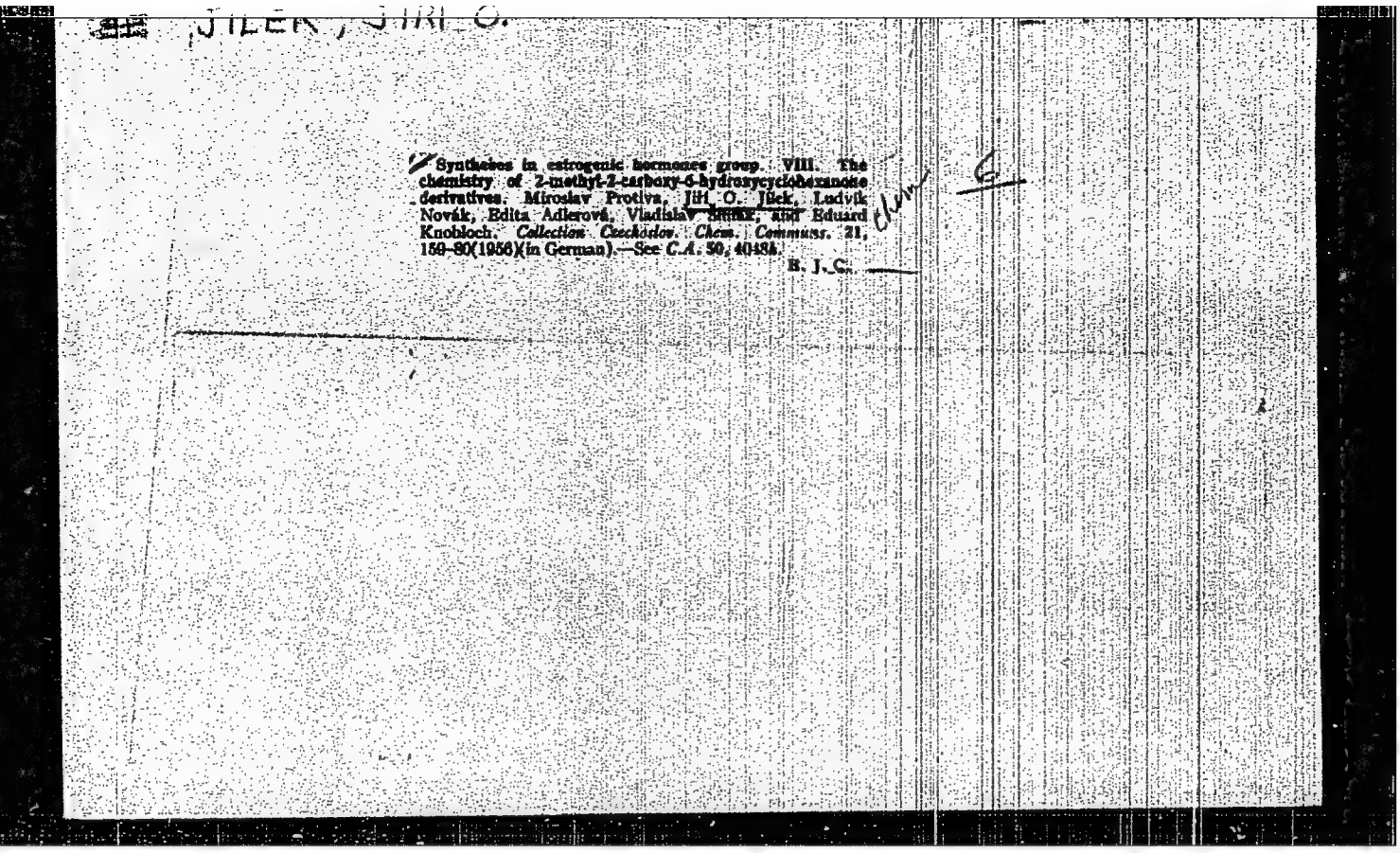
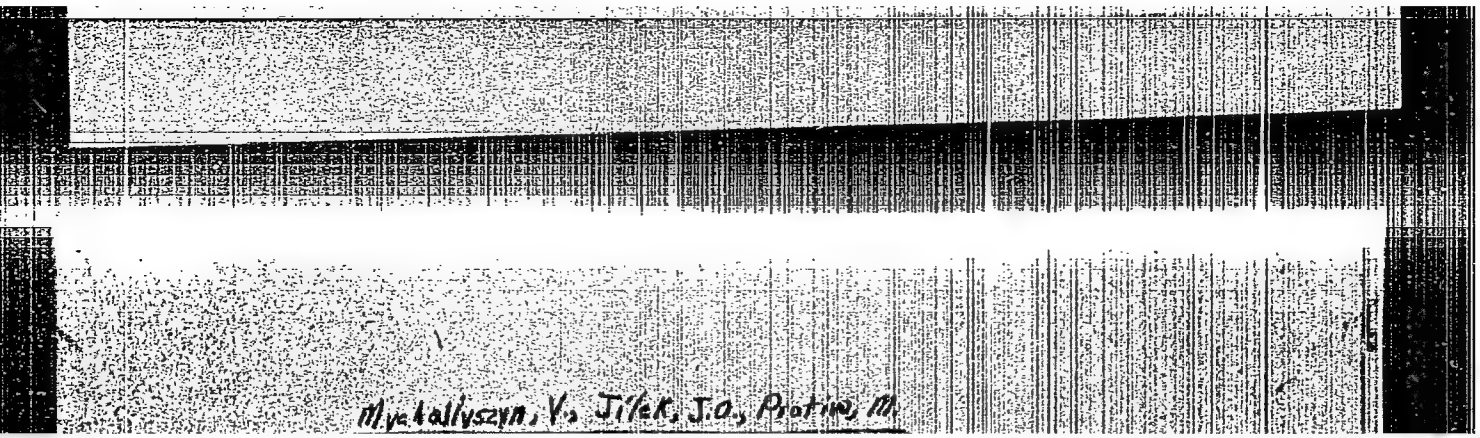
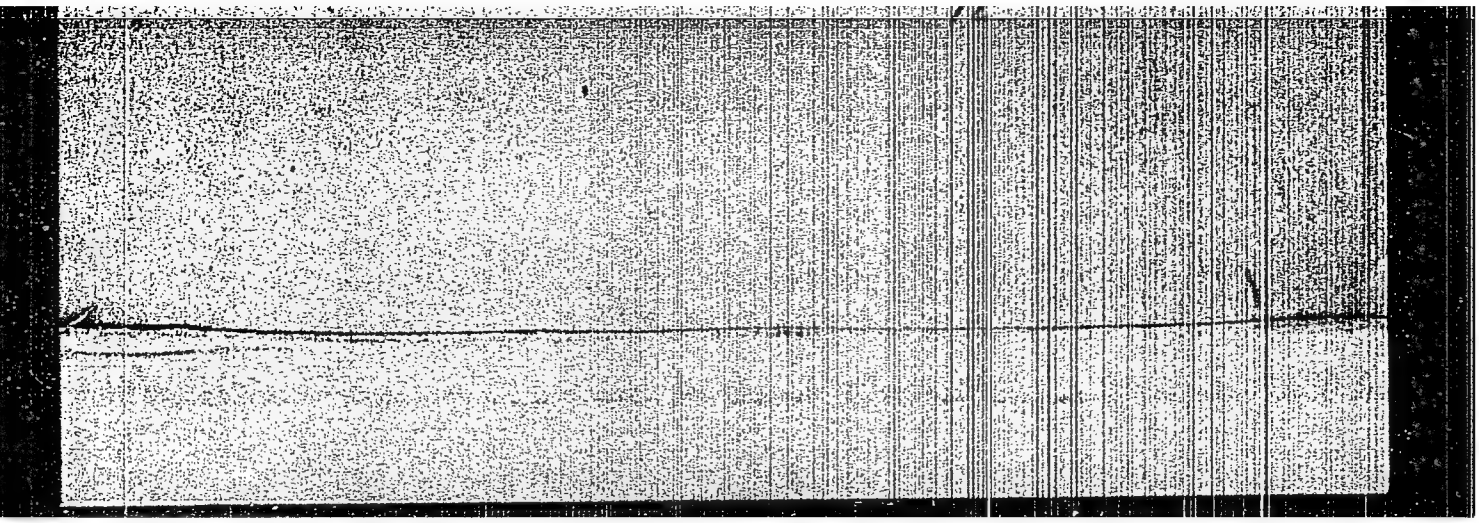


JILEK, JIRI O.

Syntheses in estrogenic hormones group. VIII. The chemistry of 2-methyl-2-carboxy-6-hydroxycyclohexanone derivatives. Miroslav Protiva, Jiří O. Jilek, Ludvík Novák, Edita Adlerová, Vladislav [illegible], and Eduard Knobloch. *Collection Czechoslov. Chem. Communs.* 21, 159-80(1956)(in German).—See *C.A.* 50, 4048i.

B. J. C.





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JILEK, J.O.

CZECHOSLOVAKIA/Organic Chemistry. Synthetic Organic Chemistry. G-2

Abs Jour: Referat Zhur-Khimiya, No 4, 1958, 11331.

Author : Mychajlyszyn, V. and Jilek, J. O.
Inst :
Title : Synthetic Analgesics. II. Synthesis and Reactions of Several Hydrogenated Derivatives of 1-Phenylisoquinoline.

Orig Pub: Chem Listy, 50, No 12, 2011-2017 (1956) (in Czech)

Abstract: The reaction of the iodomethylate of 5,6,7,8-tetrahydroisoquinoline with C_6H_5MgBr (in ether at ~ 20°) gives 1-phenyl-2-methyl-1,2,5,6,7,8-hexahydroisoquinoline (I), yield 28%, bp 140-143°/0.8 mm. The benzoylation of 1-cyclohexenylethylamine in 20% NaOH solution gives N-(β -1-cyclohexenyl)-benzamide (II), yield 98%, mp 78° (from alcohol; all mp's reported in this

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CZECHOSLOVAKIA/Organic Chemistry. Synthetic Organic Chemistry. G-2

Abs Jour: Referat Zhur-Khimiya, no 4, 1958, 11331.

to the picrates: 1 gms IV, 0.5 gms III, and 0.7 gms of the picrate of 1-phenyl-1,2,3,4,5,6,7,8-octahydroisoquinoline, mp 130-132°. The hydrogenation of a solution of I in CH_3OH over Pt (from PtO_2 gives 1-phenyl-2-methyl-1,2,3,4,5,6,7,8-octahydroisoquinoline (VII), yield 65%, bp 125-130°/0.2 mm; picrate (VIII), mp 224-226° (from alcohol). The iodomethylate obtained from the crude product of the cyclization of II on hydrogenation over Raney Ni in a methanol solution of KOH gives a mixture of bases, yield 40%, bp 120-140°/0.5 mm, from which 15% IV and 75% VIII are obtained. Chromatography of a petroleum ether solution of the mixture of bases on Al_2O_3 gives free VII. VII and VIII are not identical with the base (nor its picrate) obtained by the action of N-benzylidenecyclohexenylethylamine with dimethyl sulfate

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CZECHOSLOVAKIA/Organic Chemistry. Synthetic Organic Chemistry. G-2

Abs Jour: Referat Zhur-Khimiya, No 4, 1958, 11331.

(Grewe et al, Chem Ber, 81, 279 (1948); RZhKhim, 1954, 16315), to which the authors assign the same structure. The attempt to convert VII (as well as the compounds obtained by the German workers) to N-methyl-10-normorphine [sic] by heating 60 hrs at 140-150° with H_3PO_4 gave no positive results. For Communication I see RZhKhim, 1957, 30811.

Card : 5/5

JILEK J.

CZECHCSLOVAKIA/Organic Chemistry - Natural Compound and Their Synthetic Analogs. G.

Abs Jour : Ref Zhur - Khimiya, No 16, 1958, 54013

Author : Yilek, Protiva
Inst :
Title : A Study of the Synthesis of Estrogenic Hormones. XV. Reaction of Phenylacetylenes with Substituted Cyclohexanones. A New Total Synthesis of Certain Racemic Doisynolic Acids.

Orig Pub : Chem. listy, 1957, 51, No 4, 643-653

Abstract : 1-ethyl-2-methyl-7-hydroxy-1,2,3,4,9,10,11, 12-octahydrophenanthrenecarboxylic-2-acid (I) (from racemic doisynolic acids) was synthesized in the following manner:
The reaction of m-$CH_3OC_6H_4$-CK (II) with the methyl ester of 2-ethyl-3-methylcyclohexanocarboxylic-3-acid (III) in tertiary butanol (six hours at 90°C) resulted in the

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CZECHOSLOVAKIA/Organic Chemistry - Natural Compounds and Their G.

Abs Jour : Ref Zhur - Khimiya, No 16, 1958, 54013

formation of the lactone, 1-(m-methoxyphenyl-ethynyl)-2-ethyl-3-methyl-1-hydroxycyclohexancarboxylic-3-acid (V). A crude yield of 76% was obtained after chromatographic treatment on Al_2O_3, b. p. 190-205°C/0.3 mm. The hydrogenation of V on Pd/C in methanol led to the formation of the lactone, 1-[β-(m-methoxyphenyl)-ethyl]-2-ethyl-3-methyl-1-hydroxycyclohexancarboxylic-3-acid (IV), which was purified by chromatographic treatment with Al_2O_3, b. p. 200-215°C/0.8 mm, 190-205°C/0.2 mm, m. p. 70°C. (from petroleum ether - benzene).
Compound IV was also obtained by direct hydrogenation of the condensation product of III with II (without the intermediate separation of V), yield, 20.4%. The saponification of V with a 20% methanol KOH solution (boiling for 20 hours) produced 1-[β-(m-methoxyphenyl)-ethyl]-ethyl-3-methyl-1-hydroxycyclohexane carboxylic-3-acid,

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CZECHOSLOVAKIA/Organic Chemistry - Natural Compounds and Their G.

CZECHOSLOVAKIA/Organic Chemistry - Natural Compounds and Their Synthetic Analogs. G.

Abs Jour : Ref Zhur - Khimiya, No 16, 1958, 54013

β -(2-phenyl ethynyl-2-hydroxycycloheyl)-propionic acid (yield 51%, b. p. 180-230°C./1-5 mm, m. p. 83-84°C. (from petroleum ether), which product upon hydrogenation was converted into the lactone, β -(2-β -phenylethyl)-2-hydroxycyclohexyl)-propionic acid, yield 66%, m. p. 98°C. (from petroleum ether). Similiarly, III was converted into the lactone of 1-phenylethynyl-2-ethyl-3-methyl-1-hydroxy cyclohexylcarboxylic-3 acid (yield 37%, b. p. 160-180°C./0.9 mm, m. p. 90°C. (from petroleum ether), which after hydrogenation over Pd/C, was converted into the lactone, 1-(β -phenylethyl)-2-ethyl-3-methyl-1-hydroxy cyclohexylcarboxylic-3 acid, m. p. 175-180°C./0.2 mm. II was synthesized from the ethyl ester of β -(m-methoxyphenyl)- α - β -dibromo propionic acid, m. p. 58-59°C. (from petroleum ether), prepared quantitatively by bromination of the ethyl

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CZECHOSLOVAKIA / Organic Chemistry. Natural Substances and Their Synthetic Analogues. G

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 61101.

Abstract: or by Radney's catalyst under pressure, or with $LiAlH_4$, yield 52 to 56%, boiling point 158°/0.5 mm, melting point 112 to 113° (from benzene). 5--methoxytriptamine, melting point 120 to 121°, and 7-methoxytriptamine, melting point 134 to 135°, are prepared according to Spath and Lederer (Spath E., Lederer E., Ber., 1930, 63, 2102). $(CH_3)_2C(C_6H_5)CONH$, melting point 160°, is prepared by hydrolizing $(CH_3)_2C(C_6H_5)CN$ with aqueous KOH, it produces $(CH_3)_2C(C_6H_5)COOH$, melting point 77°, at the continued hydrolysis in KOH. Hydrochloride

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CZECHOSLOVAKIA / Organic Chemistry. Natural Substances and Their Synthetic Analogues. G

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 61101.

Abstract: corresponding acid, and c/ of the corresponding I and hydrochloride of the corresponding acid in C_6H_6 in the presence of aqueous NaOH at about 20°. 5-methoxytriptamine of PNA (VI), melting point 117° (from CH_3OH), was prepared of IV according to the method a, yielded 80%. Triptamide of 4-methoxy-PNA (VII), melting point 155 to 156° (CH_3OH), was prepared of I and methoxy-PNA by the method b, yield 46%. Triptamide of α-phenylisobutyric acid (VIII), melting point 137 to 138° (from benzene), was prepared of I and IV by the method c, yield 91%. Triptamide of PNA (IX), melt-

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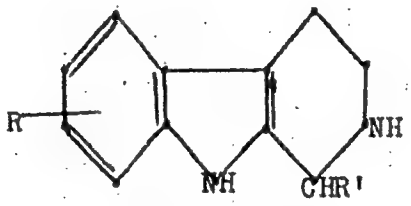
CZECHOSLOVAKIA / Organic Chemistry. Natural Substances and Their Synthetic Analogues. G

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 61101.

Abstract:



yield 79%. 7-methoxytriptamide of PNA (XIII), melting point 101 to 102° (from aqueous CH_3OH),

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CZECHOSLOVAKIA / Organic Chemistry. Natural Substances and Their Synthetic Analogues. G

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 61101.

Abstract: harman; MS - melting point 245 to 247°. Other 1,2,3,4-tetrahydronorharmans of the general formula A are prepared (if not indicated otherwise) by the cyclisation of the corresponding triptamide (same as XIV) and reduction of the produced raw 3,4-dihydronorharman (same as XV): A, R = H, R' = = $C_6H_5C(CH_3)_2$-, (from VIII), MS - melting point 225 to 226°; R = H, R' = 5,6,7,8-tetrahydro-1--naphthylmethyl, (from XIII), hydrochloride - melting point 247 to 253° (from aqueous alcohol), MS - melting point 239 to 241°; R = 6-OCH_3, R' = = $C_6H_5CH_2$, (from VI), MS - melting point 249°;

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CZECHOSLOVAKIA / Organic Chemistry. Natural Substances and Their Synthetic Analogues. G

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 61101.

Abstract: R = 8-OCH_3, R' = $C_6H_5CH_2$, (from XIII), MS - melting point 249 to 250°; R = H, R' = 4-$OCH_3C_6H_4CH_2$, (from VII) or by aging 24 g of I hydrochloride with 24 g of 4-$CH_3OC_6H_4CH_2COCOOH$ in 600 ml of water and 360 ml of acetic buffer (pH = 3.8) in the duration of 40 days at 37°, decarboxylation of the formed 1-(4-methoxybenzyl)-1,2,3,4-tetrahydronorharman-1-carboxylic acid (melting point of raw acid 223 to 225°; dissociates), passing HCl (gas) through its suspension in boiling CH_3OH, dissolution of the raw product in $CHCl_3$ and filtration through Al_2O_3; hydrochloride - melting point 252 to 254° (from CH_3OH); MS - melting point 252 to 253°; A, R = H, R' = C_6H_5, melting point

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JILEK, Jiri O.

CZECHOSLOVAKIA/Organic Chemistry. Natural Substances and Their Synthetic Analogues. G

Abs Jour: Ref Zhur-Khimiya, No 22, 1958, 74167.

Author : Miroslav Protiva, Jiri O. Jilek, Vladimir Hach, Edita Adlerova, Vladimir Mychajlyszyn.
Inst : American Chemical Society.
Title : Synthetic Models of Blood Pressure Depressing Alkaloids. II. Simple Models of Reserpine With Cyclohexane Ring.

Orig Pub: Chem. listy, 1957, 51, No 11, 2109-2117.

Abstract: Cyclohexylacetic acid (I) was prepared by the reduction of a solution of sodium cyclohexylideneacetate on Raney nickel under 110 atm. at 100°, yield 86%, boil p. 123 to 125°/5 mm; it was converted into cyclohexylacetylchloride (II) by the

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Abs Jour: Ref Zhur-Khimiya, No 22, 1958, 74167.

tion by NH_4OH; that base was reduced with 12 g of Na in 120 ml of alcohol to 1-cyclohexylmethyl-1,2,3,4-tetrahydronorharman (V) (yield 3.6 g); hydrochloride, melt. p. 245 to 246° (from alc.); metasulfonate, melt. p. 262 to 265° (from aqu. alc.). Ethyl ester (EE) of 1-oxy-4-methoxycyclohexylacetic acid was synthetized of 4-methoxycyclohexanone (VI) and $CH_2Br-COOC_2H_5$ in C_6H_6 by the reaction of Reformatskiy, yield 64%, boil. p. 110 to 111°/1.6 mm; it produced the EE of 4-methoxycyclohexenylacetic acid (VII) after 4 hours of action of $SOCl_2$ in pyridine in an ice bath, boil. p. 120°/14 mm. 4-methoxycyclohexenylacetic acid (VIII) was prepared by 12 hour boiling of VII with

CZECHOSLOVAKIA/Organic Chemistry. Natural Substances and Their Synthetic Analogues. G

Abs Jour: Ref Zhur-Khimiya, No 22, 1958, 74167.

KOH solution in alcohol, yield 85%, boil. p. 150 to 152°/2 mm, melt. p. 27 to 30°. Hydrogenation of VII on PtO_2 in CH_3COOH resulted in EE of 4-methoxycyclohexylacetic acid (IX), boil. p. 120 to 122°/20 mm. By hydrogenation of the aqueous solution of Na salt of VIII on Raney's nickel under 105 atm. at 80 to 90°, or by 12 hour boiling of IX with KOH solution in alcohol, cis-(?)-4-methoxycyclohexylacetic acid was produced, yield 80%, boil. p. 151 to 152°/3 mm, melt. p. 19 to 22°; S-benzylisothiouronic salt, melt. p. 145 to 146° (from alc.). 4-methoxycyclohexylacetyl chloride, boil. p. 108 to 111°/10 mm, synthetized of the

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of CH_3COONH_4 by 7 hour boiling with azeotropic water removal; XI was boiled 3 hours with 10%-ual NaOH and VIII was produced, yield 61%. 4-methoxy-cyclohexenylacetyl chloride (XII) produced of VIII and $SOCl_2$ was added drop by drop with simultaneous cooling to concentrated NH_4OH and 4-methoxycyclo-hexenylacetamide (XIII) was obtained, yield 45%, melt. p. 126° (from iso-C_3H_7OHO. 1.5 g of 2-(4-methoxycyclohexenyl)-ethylamine hydrochloride (XIV) was prepared by adding the solution of 3 g of XI in 10 ml of ether drop by drop to 1 g of $LiAlH_4$ in 10 ml of ether at -5°, 30 min. seasoning at -5°, 2 hour boiling, decomposition with 5 ml of water and 20 ml of 40%-ual NaOH, extraction of the ether

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Abs Jour: Ref Zhur-Khimiya, No 22, 1958, 74167.

β-methoxyadipinic acid in the mixture toluene-alcohol in the presence of H_2SO_4 at a simultaneous azeotropic removal of water leads to ethyl ester of β-methoxyadipinic acid, yield 80%, boil. p. 118 to 120°/2.5 mm, $n^{20}D = 1.4336$. By the reduction of EE of 4-oxyphenylacetic acid in alcohol on Raney's nickel in the presence of C_2H_5ONa under 125 atm and at 150 to 160°, EE of 4-oxycyclohexylacetic acid was obtained, yield 61%, boil. p. 115 to 116°/0.4 mm, which was saponified by 2 hour boiling with NaOH solution in aqueous alcohol to a mixture of stereoisomeric 4-oxycyclohexylacetic acids, yield 94%, melt. p. 110 to 120° (raw). 4-oxycyclohexylacetic acid was prepared

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Abs Jour: Ref Zhur-Khimiya, No 22, 1958, 74167.

melt. p. 177° (from alc. + eth.). Hexahydrohordenine (XVIII) was produced by hydrogenating XVII on Pt from PtO_2 in CH_3COOH, yield 58%, boil. p. 132 to 134°/10 mm; 2-(cyclohexylethyl)-dimethyl-amine was separated as a by-product of hydrogenation, yield 19%, boil. p. 82 to 84°/10 mm; picrate, melt. p. 154° (not adjusted, from alc.). 3,4,5-trimethoxybenzoate of XVIII (XIX), semisold if impure, was synthetized of XVIII and 3,4,5-trimethoxybenzoylchloride by seasoning (about 12 hours) in C_6H_6; hydrochloride, melt. p. 214° (not adjusted, from alc. + eth.). V and X show a hypotensive activity same as their aromatic analogues described in the report I (see RZhKhim, 1958, 61101). The substance XIX is not active. The position of the

Card : 10/11

COUNTRY : Czechoslovakia G-2
CATEGORY :

ABS. JOUR. : RZKhim., No. 16 1959, No. 57137

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : hydrochloride of I. Antazoline, $C_6H_5CH_2N(C_6H_5)$-$CH_2C{=}NCH_2CH_2NH$, (II) yields the following salts: A solution of 5.3 gms II in 30 ml abs alc and a solution of 1 gm H_2SO_4 in 5 ml alc are mixed together to give the ethyl sulfate of II, mp 195° (corr; from alc); 2 gms H_2SO_4 in 7 ml iso-C_3H_7OH are added with cooling to a solution of 5 gms II in 15 ml iso-CH_3H_7OH or a solution of 2.2 gms H_2SO_4 in 5 ml C_4H_9OH is added dropwise to a cold solution of 5 gms II in 15 ml n-C_4H_9OH

CARD: 2/4

JILEK, J.

CZECHOSLOVAKIA/Organic Chemistry. Natural Products and Their Synthetic Analogues. G-3

Abs Jour: Ref Zhur-Khim., No 24, 1958, 81760.

Author : Adlerova E., Novak L., Protiva M., Jilek J., Protiva M.
Inst :
Title : The Synthesis in the Group of Estrogenic Hormones. XIV. 2-Substituted Derivatives of 3-Methyl Cyclohexanone Carbonic Acid . XV. The Reaction of Phenylacetylenes with Substituted Cyclohexanones. A New Complete Synthesis of One of the Racemic Doisynolic Acids.

Orig Pub: Collect, czechosl. chem. commun., 1958, 23, No 4, 681-691; 692-703.

Abstract: See R.Zh. Khim., 1958, 11219, 54013.

Card : 1/1

CZECHOSLOVAKIA/Organic Chemistry Synthetic Organic Chemistry. G-2

Abs Jour: Ref Zhur-Khim., No 24, 1958, 81677.

Author : Mychajlyszyn V., Jilek J
Inst :
Title : The Synthetic Anesthetic Compounds. II. The Preparation and Reactions of Some Hydrogenated Derivatives of 1-Phenylisoquinoline.

Orig Pub: Collect czechosl. chem. commun., 1958, 23, No 5, 932-939.

Abstract: See R. Zh. Khim., 1958, 11331.

Card : 1/1

JILEK, J.O.; PROTIVA, M.

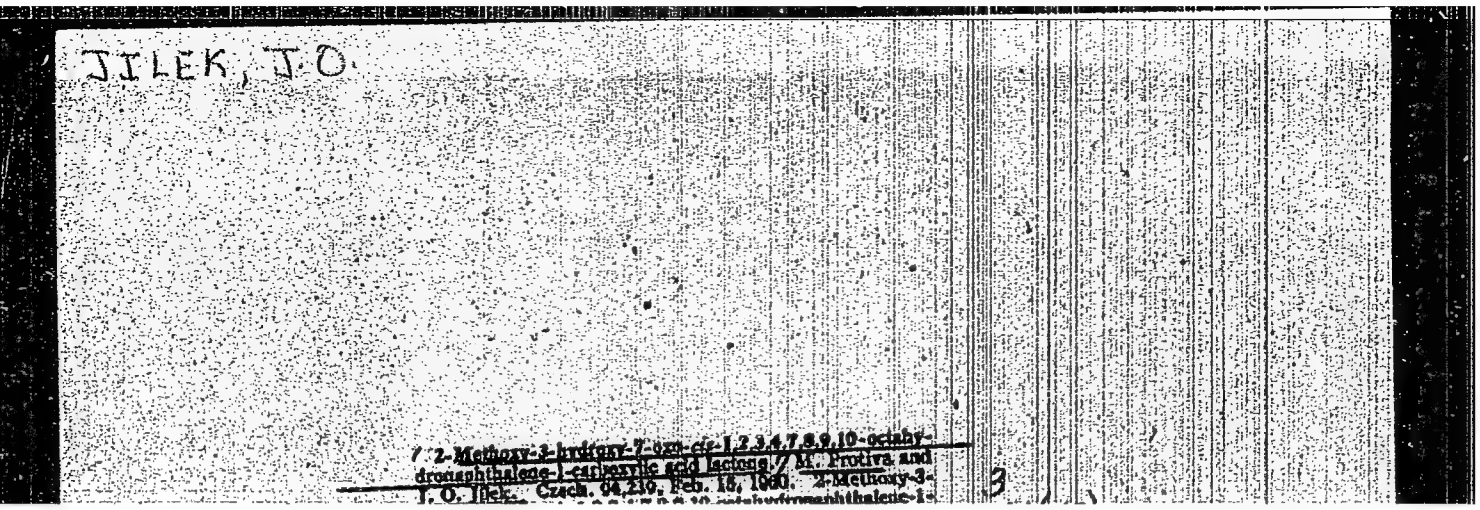
Synthetic experiments in the group of estrogenic hormones. XIX. Wagner-Meerwein arrangement of 1-methyl-2-ethylcyclehexylcarbinol and its analogue in the octahydrophenanthrene series. Coll Cz Chem 25 no.1:165-179 Ja '60. (EEAI 9:12)

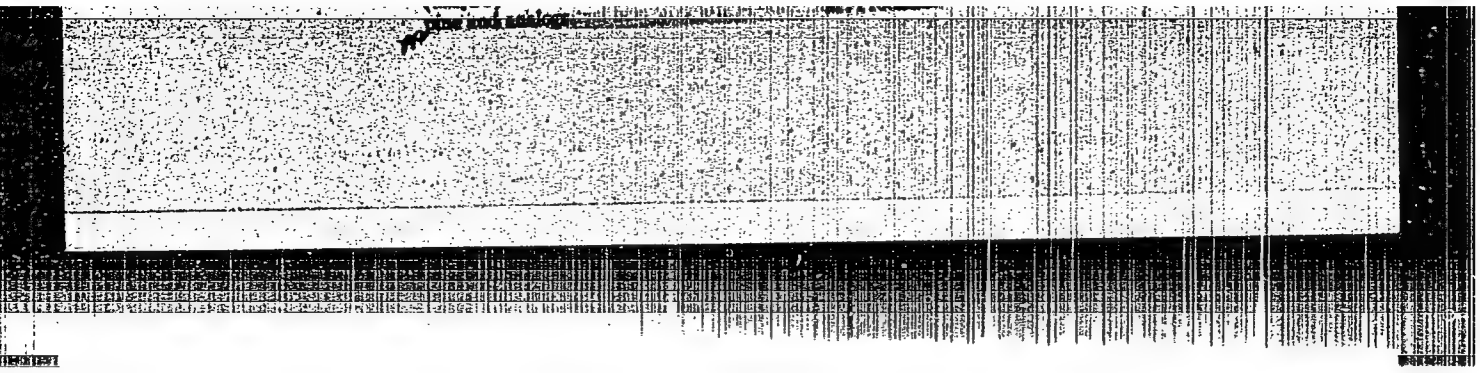
1. Forschungsinstitut fur Pharmazie und Biochemie, Prag.
(Estrogenic hormones)
(Rearrangements)
(Ethylmethylcyclohexanemethanol)
(Octahydrophenanthrene)

ADLEROVA, E.; BLAHA, L.; BOREVICKA, M.; ERNEST, I.; JILEK, J.O.; KAKAC, B.; NOVAK, L.; RAJSNER, M.; PROTIVA, M.

Synthetic experiments in the group of hypotensive alkaloids. VI. Some notes on the preparation of alicyclic components in the synthesis of compounds of the reserpine type. Coll Cz Chem 25 no.1: 221-236 Ja '60. (EEAI 9:12)

1. Forschungsinstitut fur Pharmazie und Biochemie, Prag.
(Alkaloids) (Hypotension)
(Alicyclic compounds) (Reserpine)





APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000619620013-3"

NOVAK, L.; JILEK, J. O.; KAKAC, B.; ERNEST, I.; PROTIVA, M.

Synthetic experiments in the group of hypotensive alkaloids. IX. A new method for splitting racemates in the total synthesis of reserpine. Coll Cz Chem 25 no.8:2196-2206 Ag '60. (EEAI 10:9)

1. Forschungsinstitut fur Pharmazie und Biochemie, Prag.

(Alkaloids) (Hypotension) (Tartaric acid)
(Reserpine)

JILEK, J. O.; ERNEST, I.; NOVAK, L.; RAJSNER, M.; PROTIVA, M.

Synthetic experiments in the group of hypotensive action alkaloids. XII. Contribution to the terminal phases of total synthesis of reserpine and deserpidine. Coll Cz Chem 26 no.3:687-700 Mr '61. (EEAI 10:9)

1. Forschungsinstitut fur Pharmazie und Biochemie, Prag.

(Reserpine) (Deserpidine) (Alkaloids)

JILEK, J. O.; POMYKACEK, J.; PROTIVA, M.

Synthetic tests in the group of hypotensive active alkaloids. Part 15: Synthesis of racemic homoveratrylamine analogues of reserpines and isoreserpines. Coll Cz Chem 26 no.4:1145-1159 Ap '61.

1. Forschungsinstitut fur Pharmakie und Biochemie, Prag.

(Alkaloids) (Reserpine)

PROTIVA, M.; CAPEK, A.; JILEK, O.; KAKAC, B.; TADRA, M.

Synthetic experiments in the group of hypotensive active alkaloids. XVIII. Microbiologic reduction of lactons of the (±)-5-oxo-8β-hydroxy-cis-1,4,5,8,9,10-hexahydro-1β-naphthalic acid. Coll Cz chem 26 no.6:1537-1541 Je '61.

1. Forschungsinstitut fur Pharmazie und Biochemie, Prag.

(Lactons) (Naphthalic acid)

JILEK, O. J.; KAKAC, B.; PROTIVA, M.

Synthetic experiments in the group of hypotensive active alkaloids. Part 19: Reduction of (±)-5,8-dioxo-cis-1,4,8,9,10-hexahydro-1 β-naphtoicacidisopropylesters according to Meerwein. Coll Cz Chem 26 no.9:2220-2237 '61.

1. Forschungsinstitut fur Pharmazie und Biochemie, Prag.

(Alkaloids) (Esters)

JILEK, J.

CZECHOSLOVAKIA

PROTIVA, M; JILEK, J; POMYKACEK, J; JIRKOVSKY, J; VEJDELEK, Z.

Research Institute of Pharmacy and Biochemistry (Forschungsinstitut für Pharmazie und Biochemie), Prague (for all)

Prague, Collection of Czechoslovak Chemical Communications, No 10, 1963, pp 2627-2635

"Synthetic Analgetica V. Synthetic Experiments on a Base of 4-phenyl-4-Carbethoxypiperidine (Norpethidine)."

(5)

ERNEST, I.; JILEK, J.O.; VEJDELEK, Z.J.; PROTIVA, M.

Sythetic experiments in thegroup of active hypotensive alkaloids. Pt. 26. Coll Cz Chem 28 no.4:1022-1030 Ap '63.

1. Forschungsinstitut fur Pharmazie und Biochemie, Prag.

PROTIVA, M.; JILEK, J.O.; POMYKACEK, J.; JIRKOVSKY, J.; VEJDELEK, Z.J.
SEIDLOVA, V.

Synthetic analgesics. Pts. 5-6. Coll Cz Chem 28 no.10:2627-2636, 2821-2824 O '63.

1. Forschung institut fur Pharmazie und Biochemie, Prag.

JILEK, J.O.; POMYKACEK, J.; METYSOVA, J.; METYS, J.; PROTIVA, M.

Neurotropic and psychotropic substances. Pt.3. Coll Cz Chem 30 no.2:463-471 F '65.

1. Forschungsinstitut fur Pharmazie und Biochemie, Prague.
Submitted May 4, 1964.

JILEK, J.O.; FELZ, K.; PAVLICKOVA, D.; PROTIVA, M.

Neurotropic and psychotropic substances. Pt.4. Coll Czech Chem 30 no.5:1676-1683 My '65.

1. Forschungsinstitut fur Pharmazie und Biochemie, Prague.
Submitted June 22, 1964.

JILEK, J.O.; POMYKACEK, J.; SVATEK, E.; SEIDLOVA, V.; RAJSNER, M.; FELZ, K.; HOCH, B.; PROTIVA, M.

Neurotropic and psychotropic substances. Pt.2. Coll Cz Chem 30 no.2:445-462 F '65.

1. Forschungsinstitut fur Pharmazie und Biochemie, Prague.
Submitted May 4, 1964.

JILEK, J.O.; RAJSNER, M.; POMYKACEK, J.; PROTIVA, M., inz. dr., DrSc.,
(Kourimska 17, Praha 3).

Synthetic ataraxics. Part 12. Cesk. farm. 14 no.6:294-303 Ag '65.

1. Vyzkumny ustav pro farmacii a biochemii, Praha. Submitted
December 21, 1964.

JILEK, L.

MYSLIVECEK, J.; JILEK, L.

Development of oxygen requirement in certain tissues in rats.
Chekh fiz 2 no.4:363-366 '53. (MEAL 3:7)

1. Kafedra fiziologii pri meditsinskom fakul'tete universiteta im. Karla IV, Praga.
(OXYGEN, metabolism,
*develop. of oxygen requirement in various tissues in rats, age factor)

JILEK, L.

CZECHOSLOVAKIA / Human and Animal Physiology. Metab- T
olism.

Abs Jour: Ref Zhur-Biol., No 5, 1958, 21859.

Author : Jilek L.
Inst : Univ. Carolina.
Title : Changes in 02 Requirements Following Operations On the Central Nervous System in Rats-Decortication.

Orig Pub: Med. 1956, 2, No 1, 47-59.

Abstract: Decortication of rats produced a definite lowering of 02 requirement in the animals on the third day following the operation (from 21 ml/ /100 gm of wt. in 5 min. in the normal to 13.4 ml). Under these circumstances the liver respiration diminished by 54.5%; the kidneys by 53.8%.

Card 1/1 8

CZECHOSLOVAKIA/Human and Animal Physiology (Normal and Pathological). Blood Circulation. General Problems. T-5

Abs Jour : Ref Zhur - Biol., No 11, 1958, 50769

Author : Myslivecek, J., Jilek, L., Sedlacek, J., Mourek, J.

Inst : Carolina Unversity of Prague

Title : Methods Using Permanent Vascular Cannulae.

Orig Pub : Univ. Carolina. Med., 1956, 2, No 1, 143-149.

Abstract : A recent modification of methods applying permanent cannulae for internal organs in animals is described. These canulae are made from silon, polyethylene, or polyvinylbutyrol, and are fastened to a silon net which is wrapped around vessels by sutures. Such cannulae (which are similar to the cannulae of London) make it possible to obtain blood in repeated tests, to measure vessel temperature, to record blood pressure, etc. -- N.N. Blokhin.

Card 1/1

Country : CZECHOSLOVAKIA
Category : Human and Animal Physiology. T
The Nervous System. Blood Supply.
Abs. Jour. : Ref Zhur-Biol., No 23, 1958, 106810

Author : Jilek, Lubor ***
Institut. : Katedra fysiologie fakulty vseobecneho lekarstvi Karlovy university
Title : The Reaction of the Organism to Cerebral Ischemia in Ontogenesis. I. The Development of Resistability to Cerebral Ischemia in Rats.
Orig Pub. : Sbor. lekar., 1957, 59, No 6, 188-195

Abstract : Very young rats (up to 16 days old) and adult rats endured well a ligation of both carotid arteries. Four to five weeks old rats succumbed rapidly after such operations. The development of changes in altitude hypoxia and in cerebral ischemia progressed in the same manner. An impairment of the CNS [central nervous system] resulting from disrupted blood circulation in the brain at early developmental stages, may cause the animal's death at later periods. For

***v Praze Pracovni skupina vyvolje nervovych funkci. L.J., Fysiologicky Oond. ustav, Albertov, Praha 2.

JILEK, Lubor

The response of the organism to cerebral ischemia in the course of ontogenesis. IV. Response of the rat to temporary ischemia of the CNS. Sborn. lek. 60 no.7-8:235-241 July 58.

1. Fysiologicky ustav fakulty vsobecneho lekarstvi university Karlovy v Praze prednosta prof. Dr. F. Karasek.
(CENTRAL NERVOUS SYSTEM, blood supply
ischemia, exper. eff. on newborn & adults rats (Cz))

JÍLEK, Lubor

The response of the organism to cerebral ischemia in the course of ontogenesis. V. Contribution to the research on changes in cerebral metabolism after ligation of the carotid arteries during ontogenesis in rats. Sborn. lek. 60 no.7-8:242-248 July 58.

1. Fysiologicky ustav fakulty vseobecneho lekarstvi university Karlovy v Praze, prednosta prof. Dr. F. Karasek.
(ARTERIES, CAROTID, physiology
eff. of exper. ligation on cerebral metab. in newborn & adult rats (Cz))
(BRAIN, metabolism
eff. of exper. ligation of carotid arteries in newborn & adult rats (Cz))

FISCHER, J.; JILEK, L.

Regeneration of changes in the central nervous system induced by ligation of the carotid arteries in early stage of development in rats. Cesk. fysiol 7 no.5:452-453 Sept 58.

1. II. patologicko-anatomicky ustav a Fysiologicky ustav fak. vseob. lek. UK, Praha.

(BRAIN, physiol.
regen. of changed induced by carotid ligation in young rats (Cz))
(ARTERIES, CAROTID, physiol.
same)

JILEK, L.; MARES, P.

Effect of external temperature on resistance of young rats to ligation of the carotid arteries. Cesk. fysiol. 7 no.5:486-487 Sept 58.

1. Fysiologicky ustav fak. vseob. lek. KU, Praha.
(TEMPERATURE, effects,
on resist. of young rats to ligation of carotid artery (Cz))
(ARTERIES, CAROTID, physiol.
eff. of temperature on resist. of young rats to ligation (Cz))

JILEK, L.; TROJAN, S.

Studies on the development of regulation of cerebral circulation. Cesk. fysiol. 7 no.5:487-488 Sept 58.

1. Fysiologicky ustav fak. vseob. lek. KU, Praha.
(BRAIN, blood supply,
age factor in develop. of cerebral circ., eff. of body temperature (Cz))
(AGING, effects,
on brain circ. regulation, body temperature factor (Cz))
(BODY TEMPERATURE, physiol.
in regulation of cerebral circ., age factor (Cz))